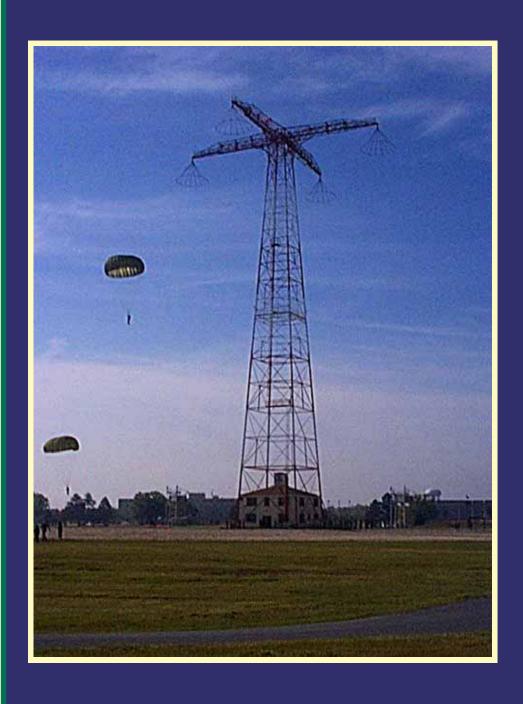
# 2005 2005

# Fort Benning

Installation Action Plan





# 2005 IAP

# Fort Benning

Georgia

# **Statement of Purpose**

The purpose of the Installation Action Plan (IAP) is to outline the total multi-year Installation Restoration Program (IRP) for an installation. The plan identifies environmental cleanup requirements at each site or area of concern, and proposes a comprehensive, installation-wide approach, with associated costs and schedules, to conduct investigations and necessary remedial actions.

The IRP is specifically focused on contamination resulting from past activities, and is funded by the centrally-managed Environmental Restoration, Army (ER,A) budget account. Cleanup activities directed at contamination primarily resulting from current operations are separately funded and managed, and, although mentioned where relevant, will not generally be discussed in detail in an IAP.

In an effort to coordinate planning information between the IRP manager, the U.S. Army Environmental Center (USAEC), installations, executing agencies, regulatory agencies, and the public, an IAP has been completed for Fort Benning. The IAP is used to track requirements, schedules and tentative budgets for all major Army installation restoration programs.

All site specific funding and schedule information has been prepared according to projected overall Army funding levels and is therefore subject to change. Under current project funding, all remedies will be in place at Fort Benning by the end of 2005.

The following persons contributed to the formulation and completion of this 2005 Installation Action Plan for Fort Benning during a planning workshop held on 25 and 26 May 2004:

Enginnering & Environment, Inc.

Fort Benning

Georgia Environmental Protection Department (GAEPD)

U.S. Army Environmental Center

U.S. Army Corps of Engineers, Savannah District

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# Acronyms & Abbreviations

AAEE0	Array Air Farras Freshanda Caminas
AAFES	Army, Air Force Exchange Services Assistant Chief of Staff for Installation
ACSIM	Management
AEDBR	Army Environmental Database Restoration
agt	Agent
ammo	Ammunition
AST	Aboveground Storage Tank
BOQ	Bachelor Officer Quarters
DTEV	Benzene, Toluene, Ethylbenzene, and
BTEX	Xylene
CAIS	Chemical Agent Identification Sets
CAP	Corrective Action Plan
CARC	Chemical Agent Resistant Compound
CERCLA	Comprehensive Environmental Response,
OLNOLA	Compensation and Liability Act of 1980
CMS	Corrective Measures Study
COC	Contaminant of Concern
COE	U.S. Army Corps of Engineers
Contam	Contamintated
CRP	Community Relations Plan
CS	Confirmatory Sampling
CY	Cubic Yards
DA	Department of Army
DEH	Directorate of Engineering and Housing
DERA	Defense Environmental Restoration Account (currently called ER,A)
	Defense Environmental Restoration
DERP	Program
	Directorate of Facilities Engineering and
DFEL	Logistics
DoD	Department of Defense
DPW	Directorate of Public Works
DRMO	Defense Reutilization and Marketing Office
FCBC	Edgewood Chemical & Biological
ECBC	Command
ENG	Engineering
EPA	United States Environmental Protection
	Agency
ER,A	Environmental Restoration, Army (formerly
	called DERA)
FBSB	Fort Benning
Flam	Flammable
FS	Feasibility Study
FY	Fiscal Year
GAEPD	Georgia Department of Natural Resources,
GW	Environmental Protection Division Groundwater
HRS2	Hazard Ranking System Score
IAP	Installation Action Plan
IRA	Interim Remedial Action
IRP	Installation Restoration Program
LF	Landfill
LTM	Long Term Monitoring
LTO	Long Term Operation
LUST	Leaking Underground Storage Tanks
MAG	Magazine

NAME	Metatement
MAINT	Maintenance
MATL	Material
MCL	Maximum Contaminant Level
MMRP	Military Munitions Response Program
MNA	Monitored Natural Attenuation
MOGAS	Motor Gasoline
NE	Not Evaluated
NFA	No Further Action
NPDWR	National Primary Drinking Water Regulation
NPL	National Priorities List
NSDWR	National Safe Drinking Water
O&M	Operations & Maintenance
ocs	Officer Candidate School
OMA	Operations and Maintenance - Army
ORC	Oxygen Release Compound
OWS	Oil and Water Separator
PA	Preliminary Assessment
PAH	Polycyclic Aromatic Hydrocarbons
PCB	Polychlorinated Biphenyls
POL	Petroleum, Oil and Lubricants
POM	Program, Operation, Management
PPB	Parts Per Billion
PY	Prior Year
RA	Remedial Action
RA(C)	Remedial Action - Construction
RA(O)	Remedial Action - Operation
RAB	Restoration Advisory Board
RAOP	Remedial Action - Operation
RBC	Risk-based concentrations
RC	Response Complete
RCRA	Resource Conservation and Recovery Act
RD	Remedial Design
REM	Removal
RFA	RCRA Facility Assessment
RFI	RCRA Facility Investigation
RI	Remedial Investigation
RIP	Remedy in Place
RPR	Repair
RRSE	Relative Risk Site Evaluation
S&R	Supervision and Remediation
Odit	Site Characterization, Analysis Penetrometer
SCAPS	System
SI	Site Inspection
SL	Soil
STGE	
SVE	Storage Soil Vapor Extraction
SVOC	Semi Volatile Organic Compounds
SWMU	Solid Waste Management Unit
TCE	Trichloroethylene
TEU	Technical Escort Unit
TRADOC	Training & Doctrine Command
TSD	Treatment, Storage and Disposal

Acronyms continued on next page

Fort Benning 2005 Installation Action Plan Acronyms

# (Acronyms & Abbreviations)

ug/L	micrograms per liter
USACE	United States Army Corps of Engineers
USACHPPM	United States Army Center for Health Promotion and Preventive Medicine (formerly called USAEHA)
USACMDA	U.S. Army Chemical Materiel Destruction Agency
USAEC	United States Army Environmental Center (formerly called USATHAMA)
USAEHA	United States Army Environmental Hygiene Agency (currently called USACHPPM)
USAIC	United States Army Infantry Center
USAIS	U.S. Army Infantry School
USATHAMA	United States Army Toxic and Hazardous Material Agency (currently called USAEC)
UST	Underground Storage Tank
UXO	Unexploded Ordnance
VEH	Vehicle
VOC	Volatile Organic Compounds



Status:

• No confirmed off-post contamination

• Non-National Priorities List (NPL) SITE

• Generalized Resource Conservation Recovery Act (RCRA)

• Part B Corrective Action Requirement

Number of AEDB-R Sites:

45 AEDB-R sites

19 Active sites (14 are Remedy-in-Place with RA(O)/LTM)

26 Response Complete

Different Site Types:

1 Fire/Crash Training Area 24 Landfills

1 Surface Disposal Area 5 Spill Site Areas

3 Underground Storage Tanks 8 Contaminated Buildings

2 Contaminated Sediments

Contaminants of Concern:

Gasoline (BTEX), Paint, Trichloroethylene (TCE), Leachate

Media of Concern:

Soil, Groundwater, Surface Water, Sediment, Air

Completed REM/IRA/RA:

• REM - FY92 Soil/vials of Chemical Agent (FBSB-87)

• REM - FY97 Soil Removal (FBSB-86)

Current IRP Phases:

RFI at 2 sites RA(C) at 3 sites RA(O) at 4 sites LTM at 10 sites

Projected IRP Phases:

RA(O) at 5 sites LTM at 16 sites

Identified Possible REM/IRA/RA:

RA at 3 sites (FBSB-68, 93, 99)

Duration:

Year of IRP Inception: 1982 Year of RA Completion: 2005 Year of IRP Completion: 2010

# Installation Information

#### SITE DESCRIPTION:

Fort Benning is situated in the western central portion of the State of Georgia, lying on the southern border of the city of Columbus, the second largest city in the state. Part of the reservation lies across the Chattahoochee River which forms the Georgia-Alabama border. It occupies an area of approximately 182,000 acres of which approximately 12,000 acres are in Alabama. Stretching about 20 miles north-south and east-west, Fort Benning covers three counties - Muscogee and Chattahoochee in Georgia and Russell in Alabama.

#### **COMMAND ORGANIZATION:**

ACSIM (Assistant Chief of Staff for Installation Management)

Installation: Fort Benning, Directorate of Public Works, (DPW),

Environmental Management Division, Environmental Programs

Management Branch.

#### IRP EXECUTING AGENCIES:

• Investigative and Remedial Action Phases - U.S. Army Corps of Engineers South Atlantic Division, Savannah District.

# REGULATORY PARTICIPATION:

**Federal:** U.S. Environmental Protection Agency, Region IV, Albany, Georgia Branch.

**State:** Georgia Department of Natural Resources, Environmental Protection Division.

#### **REGULATORY STATUS:**

- Not on the National Priorities List.
- General RCRA Part B Permit corrective action requirement did not include list of specific Solid Waste Management Units (SWMUs).
- RCRA Facility Assessment conducted 4th Qtr FY 95 is included in new permit in the form of a list of specific SWMUs.

#### MAJOR CHANGES TO IAP FROM PREVIOUS YEAR (FY04):

- The installation received a No Further Action (NFA) assessment from GAEPD regarding two sites, FBSB-96 Main Mall Gasoline Station, and FBSB-98 Soil Contamination at Stockade. Also several of the paint shops included in FBSB-54, Installation Paint Facilities were given NFAs.
- A Military Munition Response Program (MMRP) section was added to the IAP.
- Many of the Supplemental RFI actions were finalized.
- Several removal actions were completed to include: removing abandoned 55 gallon drums from FBSB-97, Abandoned Drum Disposal Site, and chlorinated solvent contaminated soil at FBSB-99, Ordnance Shop.

# **Installation Information**

LOCATION, HISTORY & MISSION: Fort Benning is an active U.S. Army facility under the jurisdiction of the Training and Doctrine Command (TRADOC). The Main Post area of Fort Benning lies approximately 8 miles southwest of the business district of Columbus, Georgia. The installation's primary mission is the preparation and training of combat infantry soldiers. This mission is accomplished by the U.S. Army Infantry School (USAIS), and includes the training of combat leaders, both commissioned and noncommissioned officers, of all ranks.

Fort Benning, originally known as Camp Benning, was established in September 1918 as a temporary facility named in honor of a local Confederate hero, General Henry Lewis Benning. It was selected as the site for the new USAIS when the infantry training centers located at Fort Sill, Oklahoma, and Camps Perry and Hancock, Georgia, were closed.

In June 1919, the U.S. Army purchased a large plantation from its owner, Arthur Bussey, and established headquarters in the family residence, which was known as Riverside. With the construction of new facilities and the relocation of the U.S. Army Infantry Board from Fort Leavenworth, Kansas, Camp Benning began to grow. In 1922, Camp Benning achieved permanent military status and was consequently redesignated as Fort Benning.

Construction of family housing, soldiers' quarters, a hospital, athletic fields, and mess facilities was accomplished in the 1920s. The USAIS continued training during this time and by 1930 had graduated 5,000 soldiers. Aviation activities began at Fort Benning in 1930 and the Works Project Administration programs, conceived during the Great Depression, provided the impetus for construction of the first runways and hangars at Lawson Army Airfield, the first Fort Benning airstrip. Construction during this period was not restricted to aviation facilities, however, and massive federal funding made the addition of further housing and educational buildings possible, including a new building for USAIS in 1935.

World War II (WWII) brought significant changes to Fort Benning and to the philosophy and operation of USAIS. The birth of the airborne infantry concept resulted in the performance of parachute test jumps over Lawson Army Airfield. The immediate success of such testing led to the establishment in 1942 of the Parachute School, which began troop training at the rate of 4,000 men per month. WWII increased the demand for combat officers and Fort Benning met the challenge with the organization of the Officer Candidate School (OCS), which operated from 1941 to 1946.

When the Korean Conflict escalated, the OCS was reopened to train junior officers and in 1967 a Noncommissioned Officers training program was instituted to provide squad and fire team leaders.

Wooden mobilization facilities covering a wide area were constructed at Fort Benning during the early 1940s, including two new areas known as Sand Hill and Harmony Church. Each facility was designed to be self-sufficient and included motor parks, barracks, and administration and support buildings. A major reorganization occurred following WWII when, in 1949, all of the units and activities at Fort Benning were consolidated under one command, forming the USAIC. In addition, the two positions of Commanding General of the Post and Commandant of USAIS were combined.

The 1950s at Fort Benning were characterized by activities reaffirming its permanent status. Several new units were formed, including the Ranger Training Command and the U.S. Army Infantry Human Research unit, designed to study human response to training procedures and techniques. Another new area, Kelly Hill, was added to the reservation and served as a self-sustaining entity, housing an entire infantry brigade. Housing facilities, a school, bachelor officer quarters (BOQ), and Martin Army Hospital were erected during this decade to improve the quality of life at Fort Benning.

# Installation Information

LOCATION, HISTORY & MISSION continued: The escalation of the Vietnam Conflict during the 1960s shifted the emphasis of instruction at USAIS toward combined-arms training. Centralization of training responsibilities commenced in 1961 and continued until 1964, when all such activities were assigned to the Infantry School.

The cessation of U.S. military involvement in Vietnam was followed by the redirection of American military organization toward an all-volunteer army. The Modern Volunteer Army program was initiated at Fort Benning, and in 1973, the 197th Infantry Brigade at Kelley Hill became the Army's first all-volunteer unit and the first combined-arms team under the Strategic Army Forces concept. In 1974, the Army announced that Advanced Individual Training for infantry personnel would be conducted at Fort Benning, resulting in plans for a major training complex on Sand Hill and in the modernization of living facilities on the reservation.

Fort Benning, a non-NPL site, is regulated primarily by the Georgia Department of Natural Resources. Fort Benning's RCRA Part B permit requires that Fort Benning investigate all potential Solid Waste Management Units (SWMUs). When this permit was updated in 1996, it included a specific list of SWMUs based on the RCRA Facility Assessment conducted by USACHPPM in 1994.

# **OVERVIEW**

Fort Benning has a variety of SWMUs under investigation. Nonetheless, because the state has not conducted a facility assessment (RFA) on the installation, all sites have been addressed proactively and not under regulatory mandate. Fort Benning has therefore attempted to rank sites for cleanup in relation to those sites that pose the greatest health and environmental risks.

Though Fort Benning's Restoration program has been active for many years, reduced base operations and support funding adversely impacted our ability to fund environmental staffing and restoration projects. Lack of state interest and transient personnel have additionally resulted in little continuity in the program. Nonetheless, in August of 1993, Headquarters TRADOC funded a Defense Environmental Restoration Account (DERA) contract position to execute the Installation Restoration Program (IRP); this action should resolve many of Fort Benning's environmental problems. Additionally, a better relationship between Fort Benning and the Georgia Department of Natural Resources has been fostered that is already resulting in greater cooperation and trust between the two organizations.

The 1982 Installation Assessment and HRS2 scoring found that Fort Benning's SWMUs cumulatively pose little health/safety threat or threat to the environment. Certain individual sites, however, pose greater health threats. For example, long-term exposure to the Former Pesticide Mixing/Storage Facility may have resulted in an elevated cancer risk to workers. Any digging at the Chemical Agent Burial Site may release chemical agents, posing a safety hazard.

In general, most SWMUs require no further remedial action, though many require continued monitoring. Fort Benning's DERP has already addressed many of its identified cleanup sites. Nonetheless, cleanup actions will continue until 2010 and possibly longer, depending on requirements presented by the State of Georgia.

In early surveys, Fort Benning considered the landfills to be of most concern. The Army Environmental Hygiene Agency, (USAEHA), began surveying the landfills at Fort Benning for soil and groundwater contamination in 1986. Today, all of Fort Benning's landfills, except those that are newly discovered, have been evaluated.

In general, no significant contamination exists from landfill activities with the following exceptions. The aquifer under Landfill 13 is contaminated with relatively high levels of Trichlorethylene (TCE) and other contaminants. The state of Georgia may require groundwater treatment at this site. Other Fort Benning landfills, including Landfills 4,6,7,8 and 10 have been investigated, and may require corrective action, erosion control, and long-term monitoring.

Releases of gasoline and related fuels/VOCs have caused the majority of Fort Benning's groundwater problems. The aquifer under the Old Fire Training area is contaminated with fuels released during training exercises in the 1960s and 1970s. Cleanup of groundwater contamination at leaking underground storage tank sites is also a high priority, (see attachment 1, Unconstrained Cost to Complete Schedule). Several former gas station sites (Buildings 3763 and 9051) may also require cleanup. The Main Mall Gasoline Station was successfully cleaned up using air sparging and soil vapor extractions.

In spite of these few problem areas, Fort Benning's groundwater problems are minor. Notably, all contamination is restricted to areas on post; it is highly unlikely that contaminants will migrate offpost. Furthermore, because Fort Benning is a large installation (~182,000 acres), groundwater resources are enormous. The areas of contamination currently present will not significantly affect potential usage of groundwater on the installation in the future.

In general, areas of contamination at Fort Benning are small and are best remediated through simple removals. 211 underground storage tanks and surrounding contaminated soil have been removed. In the future, the DERP may begin addressing lead and Unexploded Ordnance (UXO) contamination on closed and inactive firing and demolition ranges. At the Pesticide Mixing and Storage Facility, cleanup of pesticide contamination has been accomplished through simple excavation and incineration off-post.

## PREVIOUS STUDIES

#### 1977

• USAEHA Landfill Study No. 26-0026-78, Fort Benning, Georgia, (Landfill 13) 5 August 1977.

#### 1979

• DEH Draft Environmental Impact Statement: On-going Siting and Mission Activities. U.S. Army Infantry Center, Fort Benning, Georgia, 1979.

#### 1982

• Installation Assessment of Fort Benning, Georgia. Report No. 307. Prepared for USATHAMA by Environmental Science and Engineering, July 1982.

#### 1986

- USAEHA Geohydrologic Study No. 38-26-0833-87. Landfills 2 and 21, Fort Benning, Georgia, 1986.
- USAEHA Geohydrologic Study No. 38-26-0602-87. Landfills 5 and 6, Fort Benning, Georgia, 1986.
- USAEHA Groundwater Study No. 38-26-0905-87. Leachate Detection at Landfills 7 and 8, Fort Benning, Georgia, June 1986.

#### 1987

- USAEHA Geohydrologic Study No. 38-26-0817-88. Landfills 3, 9, 18, and 20, Fort Benning, Georgia, 1987.
- USAEHA Geohydrologic Study No. 38-26-0818-88. Landfills 4 and 10, Fort Benning, Georgia, 1987.
- USAEHA Groundwater Quality Investigations at Closed Landfills 1, 11, 12, 13, 14, 15, 16, 19, and 23, Fort Benning, Georgia, 1987.
- USAEHA Geohydrologic Study No. 38-26-0816-87. Groundwater Quality at Closed Landfills 12, 14, and 15. Fort Benning, Georgia, February 1987.
- USAEHA Geohydrologic Study NO. 38-26-0867-88. Groundwater Quality Investigations at Closed Landfills 16 and 19. Fort Benning, Georgia, May 1987.

#### 1988

- USAEHA Solid Waste Disposal Consultation No. 38-26-0889-88. Evaluation of the Cover System at Landfill No. 13, Fort Benning, Georgia, 8-12 February 1988.
- USAEHA Environmental Operations Review No. 43-21-7035-89. U.S. Army Infantry Center, Fort Benning, Georgia, 1988.
- USAEHA Solid Waste Management Survey No. 38-26-0886-88, Fort Benning, Georgia, 1988.

#### 1989

- RCRA Facility Investigation Work Progression Plan, Phase I, Landfill No. 13, Fort Benning, Georgia. Prepared for the Army Corps of Engineers, Kansas City District by Hunter/ESE Inc., January 1989.
- Site Specific Health and Safety Plan, Landfill No. 13, Fort Benning, Georgia. Prepared for the Savannah District Corps of Engineers by Hunter/ESE, Inc., January 1989.
- Fort Benning Remedial Investigation, Phase I, Technical Memorandum (Landfill 13). Prepared for the U.S. Army Corps of Engineers, Kansas City District, by Environmental Science and Engineering, Inc., July 1989.

Previous Studies continued on next page

### PREVIOUS STUDIES, continued

#### 1990

- USAEHA Solid Waste Disposal Consultation No. 38-62-0190-91, Fort Benning, Georgia, 1990.
- Bio-Chem Analysts, Inc. Fort Benning Waste Analysis, Contract No. DABT1090P7030, 1990.
- Fort Benning Remedial Investigation, Phase II, Technical Memorandum (Landfill 13). Prepared for the U.S. Army Corps of Engineers, Kansas City District, by Environmental Science and Engineering, Inc., May 1990.
- Fort Benning, Conceptual Design 35 Design and Corrective Measures Study, Landfill No. 13. Prepared for the Kansas City District Corps of Engineers by Environmental Science and Engineering, Inc., October 1990.
- Corrective Action Plan for Main Mall Service Station, Underground Fuel Storage Tanks, Fort Benning, Georgia, October 1990. U.S. Army Corps of Engineers, Savannah District.

#### 1991

- USAEHA Groundwater Quality Survey No. 38-26-0390-91. Camp Frank D. Merrill, Dahlonega, Georgia, July 1991.
  - USAEHA Geohydrologic Study No. 38-26-K969-91, Old Fire Training Area, Fort Benning, Georgia, 1991.
- 100% Specification Submittal for the Closure of Fort Benning Landfill No. 13. Prepared for the U.S. Army Corps of Engineers, Kansas City District, by Environmental Science and Engineering, Inc., July 1991.
- 100% Specification Submittal Operation and Maintenance Manual for the Closure of Fort Benning Landfill No.13. Prepared for the U.S. Army Corps of Engineers, Kansas City District, by Environmental Science and Engineering, Inc., July 1991.
- 100% Submittal Health and Safety Design Analysis for the Closure of Fort Benning Landfill No. 13. Prepared for the U.S. Army Corps of Engineers, Kansas City District, by Environmental Science and Engineering, Inc., July 1991.

#### 1992

- Preliminary Site Inspection For Fort Benning Military Reservation. Prepared for the U.S. Army Corps of Engineers by Advanced Science, Inc., January 1992.
- Remedial Investigation/Feasibility Study, Fort Benning Pesticide Site, Chemical Agent Burial Site, Columbus, Georgia. Prepared for USATHAMA by ABB Environmental Services, Inc., October 1992.

#### 1993

• Final Installation Action Plan (IAP) for Fort Benning, Georgia. Prepared for the Savannah District Corps of Engineers by B & V Waste Science and Technology, Inc., July 29, 1993.

#### 1994

- USAEHA Geohydrologic Study No. 38-26-KW27-94, Old Fire Training Area, Fort Benning, Georgia, 1994
- RCRA Facility Assessment No. 38-26-2650-95, Fort Benning, Georgia, December 1994, USACHPPM.

#### 1995

• RCRA Facility Assessment No. 38-26-3299-95, Fort Benning, Georgia, August 1995, USACHPPM.

#### 1997

• Subsurface Investigation for Relative Risk Ranking, Thirteen Installation Restoration Program (IRP) Sites, Fort Benning Georgia, September 1997, Savannah District USACE.

## PREVIOUS STUDIES, continued

#### 1998

• Phase I RFI Reports for FY97 SWMU Group, Fort Benning Georgia, December, 1998, Savannah District USACE.

#### 2000

• RFI Reports for FY98 SWMU Group, Fort Benning Georgia, January, 2000, Savannah District USACE.

#### 2001

• RFI Reports for FY01 IRP SWMU Sites, Fort Benning Georgia, September 2002.

#### 2002

• RFI Reports for FY02 IRP SWMU Sites, Fort Benning Georgia, September 2002.

#### 2003

• Fort Benning Baseline Risk Assessment Installation Work Plan and Supportive Documents, Fort Benning Georgia, Revised 28 July 2003.

#### 2004

- Phase III RCRA RFI for the Installation Tank Repair Compound, Vehicle Maintenance Shop Compound and Installation Gas Station, Building 3763, March 2004.
- Revised Final Work Plan, Interim Measures Removal Action for SWMU FBSB-97 Abandoned Drum Disposal Site, Fort Benning, Georgia, March 18, 2004.
- Corrective Action Plan for SWMU FBSB-39, Building 377, Engineering Field Maintenance Shop, Fort Benning, Georgia, May 2004.

# 2005 IAP

# Fort Benning Active ER,A Site Descriptions

# FIXED LAUNDRY (BLDG 2500) FBSB-26

## (SITE DESCRIPTION)

Buildings 2500 (SWMU 26C) and 2501 (SWMU 26A) were located at the intersection of Indianhead Road and Marchant Street on Main Post. The buildings were demolished in January of 1994. Operation at the facility ceased in 1984. The area is now covered with asphalt and grass and is approximately 250 ft x 250 ft.

This site was first mentioned in the 1982 Installation Assessment of Fort Benning. Unfortunately, this document did not address the potential for past contamination at the site. The single reference to this facility is on page 2-2, "Bldg. 2500 houses a laundry in which no dry cleaning is performed." Additionally, the study gave no information relating to how the site was evaluated.

According to installation personnel interviewed, all installation laundry and dry cleaning was processed at this site from the 1940s until 1984. Dry cleaning solvents previously used at the facility were stored in 20

#### **STATUS**

**RRSE RATING:** High

**CONTAMINANTS:** TCE, Vinyl Chloride and other chlorinated solvents

**MEDIA OF CONCERN:** 

Soil, Groundwater

**COMPLETED IRP PHASE:** 

**RFA** 

**CURRENT IRP PHASE: RFI** 

(funded)

**FUTURE IRP PHASE: LTM** 

to 50-gallon tanks inside the building. These tanks were removed when the operations ceased in 1984. No spills at the facility have been reported.

A site visit by Fort Benning personnel in December of 1993 revealed what appeared to be three pipes coming out of the ground which may indicate the presence of underground storage tanks at the site. A search of as-built construction drawings failed to confirm the presence of USTs. A geophysical survey conducted in 1999 failed to detect any USTs or associated piping.

FBSB-64 (Landfill 2) and FBSB-99 are both upgradient of the Fixed Laundry Facility and may be contributing to the contamination detected at this site. Additionally, there are three other non-ER,A SWMUs upgradient of both Landfill 2 and the Fixed Laundry Facility which may be contributing to the contamination detected at this site. The installation decided to conduct a Full RFI in FY98 using OMA funds for this phase. Results of the RFI indicated groundwater contamination in the form of chlorinated solvents in several upgradient wells. Because of the proximity of this site to FBSB-64, Closed Landfill 2, both sites will require additional investigation to determine the actual source of the contamination. The installation is in the process of conducting a supplemental RFI.

Similar groundwater contaminants were detected in wells at FBSB-64 and FBSB-99. The supplemental RFI field work has been completed. The supplemental RFI may determine that this site is not a source of groundwater contamination. The supplemental RFI report is currently being prepared and will be submitted to GAEPD in first QTR FY05.

## (PROPOSED PLAN)

Once the supplemental RFI is completed, ER,A funds will be used for any corrective action that is required. A risk assessment may be required.

Based on current results and understanding of the site, the installation believes upgradient sites are the source of groundwater contamination. If the supplemental RFI substantiates this conclusion, the installation will request a NFA at this site. A Corrective Action Plan (CAP) involving this site and the other two sites (FBSB-64 and FBSB-99) may be required.

## SITE DESCRIPTION

Building 377 is a very large L-shaped building located at the west end of Tenth Division Road on Main Post. This is the maintenance shop for all DFEL heavy equipment. Hazardous waste storage and operational practices were changed in 1986 to meet new environmental regulatory requirements. Based on practices prior to 1986, spills of diesel fuel, mogas, antifreeze, waste oil, PCBs and cleaning solvents may have occurred. The asphalt at the site is in very poor physical condition which may be the result of spills.

The July 1993 draft of Fort Benning's Installation Action Plan reported the following information: According to the shop foreman, the site has been used for vehicle maintenance for at least 30 years. Two 10,000-gallon capacity USTs containing diesel and mogas were removed from the northeast corner of the site in June 1993 and replaced with two

#### **STATUS**

**RRSE RATING:** High

**CONTAMINANTS:** VOCs

MEDIA OF CONCERN:

Groundwater

**COMPLETED IRP PHASE: RFA** 

**CURRENT IRP PHASE: RFI** 

(funded)

FUTURE IRP PHASE: RA(O),

LTM

6,000-gallon capacity above ground storage tanks (ASTs). An estimated 8,000-gallon capacity UST containing heating oil lies adjacent to the northeast corner of Building 377. There has been no indication of leaks from the UST. Currently, used engine oil is stored in a 500-gallon capacity AST; waste fuel, antifreeze, and brake fluid are stored in 55-gallon drums. All wastes are presently sent to the post boiler plant for energy recovery. Visual staining was noted in the vicinity of the waste fuel area as well as throughout the vehicle parking lot. Though the 1982 preliminary site assessment addressed all sites at Fort Benning generating hazardous waste, the study was generalized and did not address specific sites. Building 377 was never mentioned by name though the study generally evaluated petroleum, oil and lubricant (POL) handling facilities.

A RFI was conducted in FY01. Results indicated that petroleum related groundwater contamination exists in the vicinity of the washrack/UST adjacent to Building 377. Pesticide contamination was also detected in the soil near Building 377 above risk based levels. Both Arsenic and Thallium were detected in the soils also above background levels.

In FY01, additional groundwater monitoring wells were installed and sampled to delineate upgradient and downgradient groundwater contamination. Additional soil samples were collected to delineate the extent of pesticide contamination in the soil. Results confirmed that pesticides are not a contaminate of concern.

A supplemental RFI report and a Baseline Risk Assessment were submitted to the GAEPD. Comments have been received from GAEPD and the installation has submitted a response. Supplemental soil sampling was conducted and no elevated levels of arsenic and thallium were detected.

## (PROPOSED PLAN)

A Corrective Action Plan is being developed. Monitored Natural Attenuation will be proposed for a period of two years followed by LTM for three years.

# INSTALLATION PAINT FACILITIES (8 SITES) FBSB-54



Paint facilities (54A-H) were summarily mentioned in both the 1982 Installation Assessment and the 1992 Preliminary Site Inspection for Fort Benning. However, these documents do not detail individual sites; therefore, information on past disposal practices is limited.

The following information on individual sites was collected by a contractor in the development of the 1993 IAP. Fort Benning was also able to include two of the seven sites in the 1994 USAEHA SWMU Investigation. As a result of the SWMU investigation findings, three sites (FBSB-54A, Bldg 2513; FBSB-54D Bldg 9064; FBSB-54F, Bldg 259) require no further action. The remaining four sites which were not included in the SWMU investigation will require further study to determine if a release has occurred.

These sites are included in the IAP because of significant changes in the way paint operations were being conducted on post.

The Site Descriptions for the eight Installation Paint Facilities begin on the following page. One site, 54G (Building 1634), is not funded through the ER,A program.

# INSTALLATION PAINT FACILITIES (SITE 1) FBSB-54A

## SITE DESCRIPTION

Building 2513 (54A) is located at the intersection of Endl Street and Lavoie Street on Main Post. This site has been used as a paint spray booth since approximately 1965. The paint booth inside this building was used to spray enamel, lacquer, and latex on mock training weapons. The paint booth has been removed. According to military personnel interviewed, no lead-based paint was used at this facility. In addition, no wastes were generated and no spills at the site were reported. No painting had been conducted at the site since early 1992. Due to the fact that paint spraying operations were conducted within an enclosed structure and any waste products generated were not stored or dis-

#### **STATUS**

**RRSE RATING:** High

CONTAMINANTS: Arsenic MEDIA OF CONCERN: Soil

**COMPLETED IRP PHASE: RFA,** 

RFI

CURRENT IRP PHASE: RC

**FUTURE IRP PHASE: RC** 

posed of onsite, it is unlikely that these past operations have impacted the environment. Nonetheless, because of a lack of appropriate documentation concerning past painting practices, this site required further investigation. Additional sampling to determine if Arsenic levels fall within localized background levels was completed in FY02.

# INSTALLATION PAINT FACILITIES (SITE 2) FBSB-54B

## SITE DESCRIPTION

Building 1751 (54B) is located just northeast of the intersection of Vibbert Avenue and Dilboy Street on Main Post. The paint booth was constructed in the late 70s or early 80s and was demolished under the auspices of the Installation Real Property Master Plan in the mid-1990s (OMA funded). The paint booth was used to apply Chemical Agent Resistant Compound (CARC) paint on vehicles. All waste paint was stored in 55-gallon drums within a bermed concrete storage area until it was sent to DRMO. According to installation personnel, no spills occurred at the site. Due to the fact that painting operations were conducted within an enclosed structure and any waste products generated were properly stored, it is unlikely that these past operations impacted the environment. Nonetheless, because of a lack of appropri-

#### **STATUS**

**RRSE RATING:** High

**CONTAMINANTS:** PAHs, Arsenic

**MEDIA OF CONCERN: Soil** 

**COMPLETED IRP PHASE: RFA** 

**CURRENT IRP PHASE: RFI** 

(Funded)

**FUTURE IRP PHASE: LTM** 

ate documentation concerning past painting practices, this site requires further investigation. PAH contamination detected in surface soils exceeded risk based screening levels. However, the PAH contamination is not believed to be associated with the operation of the paint facility. Arsenic was also detected in the soils above both background and risk based screening levels. These contaminants require further delineation. Additional sampling to determine if Arsenic levels fall within localized background levels was completed in FY02. A Supplemental RFI report was submitted to GAEPD. Comments have been received and the installation has responded to comments.

(PROPOSED PLAN)

The Installation will propose NFA.

# INSTALLATION PAINT FACILITIES (SITE 3) FBSB-54C

## SITE DESCRIPTION

Building 3746 (54C) is located just southeast of the intersection of 11th Airborne Division Road and 187th Infantry Regiment Street in the Sand Hill area. The site has been used as a CARC paint application booth since before the early 1980s. Past practices did not include using enclosed spray booths for painting activities. Due to the fact that painting operations are conducted within an enclosed structure and any waste products generated are properly stored, it is unlikely that these current operations are impacting the environment. No spills at the site have been reported. This site underwent a RCRA Phase I RFI as part of the investigation of the Tank Automotive Repair Shop (FBSB-93) and Building 3763.

Supplemental sampling was conducted to delineate the paint and solvents from the BTEX background contamination.

#### **STATUS**

**RRSE RATING:** High

**CONTAMINANTS:** Paint

**MEDIA OF CONCERN: Soil** 

**COMPLETED IRP PHASE: RFA** 

**CURRENT IRP PHASE: RFI** 

(Funded)

**FUTURE IRP PHASE: LTM** 

PROPOSED PLAN

The Installation will propose NFA.

# INSTALLATION PAINT FACILITIES (SITE 4) FBSB-54D

## SITE DESCRIPTION

Building 9064 (54D) is located approximately 300 feet south of the intersection of Bell Richards Street and Marne Road in the Kelley Hill area. The auto craft center at this site housed a paint booth where enamels were applied to vehicles. No paint was left at the site. No spills were documented at the facility. Due to the fact that paint spraying operations were conducted within an enclosed structure and any waste products generated were not stored/disposed onsite, it is unlikely that past operations impacted the environment. Nonetheless, because of the lack of appropriate documentation concerning past painting practices, this site required further investigation. Thallium was detected in the soils above both background and risk based levels. Site requires additional investigation.

#### **STATUS**

**RRSE RATING:** High

**CONTAMINANTS:** Thallium

**MEDIA OF CONCERN: Soil** 

**COMPLETED IRP PHASE: RFA,** 

RFI

CURRENT IRP PHASE: RC

**FUTURE IRP PHASE: RC** 

# INSTALLATION PAINT FACILITIES (SITE 5) FBSB-54E

## SITE DESCRIPTION

Building 2843 (54E) is located approximately 1100 feet west of the intersection of Sightseeing Road and Way Street on Main Post. The auto craft center at this site housed a paint booth where enamels were applied to vehicles. No paint was left at the site. No spills at the facility were reported. Due to the fact that paint spraying operations were conducted within an enclosed structure and any waste products generated were not stored/disposed onsite, it is unlikely that past operations impacted the environment. Arsenic and Thallium did not exceed background levels.

#### **STATUS**

**RRSE RATING:** High

**CONTAMINANTS:** Arsenic,

Thallium

**MEDIA OF CONCERN: Soil** 

**COMPLETED IRP PHASE: RFA** 

**CURRENT IRP PHASE: RFI** 

(Funded)

**FUTURE IRP PHASE: LTM** 

## $(PROPOSED\ PLAN)$

The Installation has proposed NFA.

# INSTALLATION PAINT FACILITIES (SITE 6) FBSB-54F

## SITE DESCRIPTION

Building 259 is located approximately 200 feet west of the intersection of Vibbert Avenue and Edwards Street on Main Post. Operations at this furniture shop began in 1981. According to installation personnel, spray stains and lacquers were used in the indoor paint booth at this facility. Before the installation recycling program was implemented, all waste paint was disposed in a landfill or sent to the boiler plant for energy recovery. Presently, all waste paint is placed in 55-gallon drums stored in a bermed concrete storage area and sent to DRMO. No spills at the site have been reported. This site was evaluated in the Dec 1994 USAEHA SWMU Investigation with the recommendation that no further IRP action was required.

#### **STATUS**

**RRSE RATING:** High

**CONTAMINANTS:** Paint, Solvents,

Paint Sludge

**MEDIA OF CONCERN: Soil** 

**COMPLETED PHASE: RFA** 

**CURRENT PHASE: RC** 

**FUTURE PHASE: RC** 

# INSTALLATION PAINT FACILITIES (SITE 7) FBSB-54G

## (SITE DESCRIPTION)

Building 1634 (54G) is located approximately 800 feet northeast of the intersection of Burr Street and Edwards Street on Main Post. This Directorate of Logistics' (DOL) paint booth was in operation before 1973. According to installation personnel, before the installation's recycling program was initiated, waste lacquers and enamels were poured into floor drains which discharge into the storm sewer system. No spills at the site have been reported. TCE was detected in soil and groundwater. The source of this contamination is FBSB-099 (Ordnance Shop). This site is not being funded under the ER,A program. Any remedial action associated with TCE will be addressed under RA with FBSB-99.

#### **STATUS**

RRSE RATING: High
CONTAMINANTS: TCE

MEDIA OF CONCERN: Soil

**COMPLETED IRP PHASE: RFA** 

CURRENT IRP PHASE: RC FUTURE IRP PHASE: RC

PROPOSED PLAN

The Installation will recommend No Further Action.

# INSTALLATION PAINT FACILITIES (SITE 8) FBSB-54H

## SITE DESCRIPTION

The Aparri Heliport facility (Building 4232 - 54H) is located on Jamestown Road near the Aparri Heliport. This site, which consists of a metal shed on a concrete pad, was used in the past for the open air application of CARC paint. This site was evaluated during the 1994 SWMU investigation and surface soil samples were analyzed for organic compounds and metal analytes. The results indicated that the slightly elevated levels of Lead, Chromium, and Titanium which were present did not pose a threat to human health or the environment. The RFI indicated that Thallium was detected above background levels in the soils. Lead, Chromium and Nickel exceeded background and MCLs in groundwater. Vanadium exceeded RBC and background levels in groundwater. Titanium exceed RBC levels in groundwater. Supplemental groundwater sampling was conducted to determine background

#### **STATUS**

**RRSE RATING:** High

**CONTAMINANTS:** Metals

MEDIA OF CONCERN: Soil,

Groundwater

**COMPLETED IRP PHASE:** RFA

**CURRENT IRP PHASE:** RFI

(Funded)

**FUTURE IRP PHASE: LTM** 

levels of Titanium. The previously detected levels of titanium were related to groundwater turbidity.

Additional soil sampling determined Thallium levels are within localized background levels



The Installation has proposed NFA.

# SITE DESCRIPTION

Landfill #2 is located on Main Post and is bounded by Marchant Street on the north, Burr Street on the south, Riordon Street on the west, and Edward Street on the east. This landfill, encompasses approximately 62 acres, and was operated from 1943 to 1945 using the trench method. Documentation detailing disposed waste is not available. Currently the site is used for airborne training and contains three parachute jump towers. The USAEHA Geohydrologic Study (No. 38-26-0833-87) prepared for Landfill Nos. 2 and 21 indicated that no groundwater contamination had resulted from past activities. The installation conducted a RFI at this site in FY97 using OMA funding.

Based on the results of the RFI, concentrations of TCE, Lead, Vanadium and Chromium were found in downgradient groundwater monitoring wells in excess of MCLs.

#### **STATUS**

**RRSE RATING:** Medium

**CONTAMINANTS:** TCE, Lead

MEDIA OF CONCERN:

Groundwater

**COMPLETED IRP PHASE:** 

**RFA** 

**CURRENT IRP PHASE: RFI** 

(Funded)

**FUTURE IRP PHASE: LTM** 

A supplemental RFI was conducted at this site in conjunction with FBSB-26 and FBSB-99, and may determine that this site is not a source of groundwater contamination. The report is currently being prepared and will be submitted to GAEPD in first QTR FY05.

## (PROPOSED PLAN)

A risk assessment will be conducted to ensure current land use is appropriate and that this is not the source of TCE.

Based on current results and understanding of the site, the installation believes an upgradient site is the source of groundwater contamination. If the supplemental RFI substantiates this conclusion, the installation will request a NFA at this site. A Corrective Action Plan (CAP) involving this site and the other two sites (FBSB-26 and FBSB-99) may be required.

# LANDFILL NO. 4 FBSB-66

## SITE DESCRIPTION

Landfill #4 is located southeast of the intersection of Dixie Road and Alamo Road on Main Post. This landfill was operated as a trench-type landfill from 1950 to 1953 and has an approximate area of 13 acres. Documentation detailing disposed waste at this site is not available. Presently, the area is generally covered with grass, trees, and other vegetation.

Water quality data from a 1987 USAEHA investigation indicated minor degradation of groundwater in the form of iron, manganese and pentachlorophenol. Additional groundwater monitoring at this site failed to detect Pentachlorophenol or any other herbicides. However the state of Georgia questioned the methods which were used for analysis. GAEPD required a RFI with resampling for all analytes using an approved EPA analytical method.

#### **STATUS**

**RRSE RATING:** Medium

**CONTAMINANTS:** Thallium,

Cadmium

**MEDIA OF CONCERN: Soil** 

**COMPLETED IRP PHASE:** 

RFA, RFI (Funded)

**CURRENT IRP PHASE: LTM** 

**FUTURE IRP PHASE: LTM** 

Based on three years of sampling and investigations, no groundwater contamination was detected. PAH contamination was detected in soils but was not determined to be a COC. Thallium and cadmium both exceeded risk based screening levels and thallium exceeded background levels. Cadmium was not detected in background samples.

Supplemental sampling determined thallium and cadmium are within background levels.

## PROPOSED PLAN

The Installation has requested NFA.

# SITE DESCRIPTION

Landfill #5 is located in a wooded area one mile south of Main Post and east of Lawson Army Airfield on Dixie Road. This solid waste trench and fill landfill was operated from 1953 to 1954 and covers approximately 4 acres.

The USAEHA Geohydrologic Study (No. 38-26-0602-87) prepared for Landfill No. 5 and 6 detected elevated levels of VOCs and SVOCs in groundwater samples. A 1991 USAEHA investigation concluded that Landfill #5 was not the source of the groundwater contamination in this area. GAEPD has directed that this site be kept open as an active site until it is determined whether or not the Old Fire Training Area (FBSB-88) is the source of this contamination.

#### **STATUS**

**RRSE RATING:** Medium

**CONTAMINANTS:** VOCs, SVOCs

MEDIA OF CONCERN: Soil,

Groundwater

COMPLETED IRP PHASE: RFA.

**RFI** 

**CURRENT IRP PHASE: RC** 

**FUTURE IRP PHASE:** NFA

Supplement surface soil samples were taken in FY03 from targeted locations on the surface of the landfill.

This site was being investigated concurrently with FBSB-88 (Old Fire Training Area), and FBSB-68 (Closed Landfill 6), which are in close proximity to this site. Based on the RFI results of all three sites (FBSB-88, FBSB-67, FBSB-68), it has been determined that this landfill is not a source of contamination. NFA is planned for this site. All well abandonment will be included under FBSB-68 (Closed Landfill 6).

# LANDFILL NO. 6 FBSB-68

## (SITE DESCRIPTION

Landfill #6 is located in a wooded area one mile south of Main Post and east of Lawson Army Airfield on Dixie Road. This solid waste trench and fill landfill was operated from 1954 to 1958 and covers approximately 14 acres.

The USAEHA Geohydrologic Study (No. 38-26-0602-87) prepared for Landfill No. 5 and 6 detected elevated levels of VOCs and SVOCs in groundwater samples. A 1991 USAEHA investigation concluded that Landfill #6 was not the source of the groundwater contamination in this area. However, supplemental investigations have determined that Landfill #6 is the probable contamination source of some of the downgradient wells.

A RFI report has been submitted to GAEPD. Comments were received and the installation responded to these comments. Supplemental sampling of soil and groundwater were conducted in FY03.

#### **STATUS**

**RRSE RATING:** Medium

**CONTAMINANTS:** VOCs,

**SVOCs** 

MEDIA OF CONCERN: Soil,

Groundwater

**COMPLETED IRP PHASE:** 

**RFA** 

**CURRENT IRP PHASE: RFI,** 

RA(C)

FUTURE IRP PHASE: RA(O),

LTM

This site was investigated concurrently with FBSB-88 (Old Fire Training Area), and FBSB-67 (Closed Landfill 5), which are in close proximity to this site.

# PROPOSED PLAN

A Baseline Risk Assessment will be prepared. A Corrective Action Plan will be developed based on results of the Baseline Risk Assessment.

# SITE DESCRIPTION

Landfill #7 is located at the intersection of Dixie Road and Jecelin Road and occupies 29 acres. This trench and cover landfill was operated from 1958 to 1970. The northern boundary of the landfill joins the Laundry Creek. The eastern boundary adjoins a tributary wetland of Laundry Creek. The site does not have a constructed cap. The site is currently used as a storage area for yard waste and composting. Household garbage, paper, and other municipal type wastes were placed in the landfill. A geohydrologic study (#38-26-0905-87) prepared by the USAEHA found that the groundwater contamination was well within NSDWR standards. However GAEPD in its review of the Fort Benning RFI Work Plan directed that a RFI be conducted at this site. GAEPD expressed concern about releases of barium and toluene. Problems with extensive erosion also need to

#### **STATUS**

RRSE RATING: High

**CONTAMINANTS:** Metals, Sol-

vents, POL

MEDIA OF CONCERN: Soil,

Sediment, Groundwater, Surface Water **COMPLETED IRP PHASE:** RFA

**CURRENT IRP PHASE: RFI** 

(funded)

**FUTURE IRP PHASE: LTM** 

be addressed at this site. Slopes adjoining Jecelyn Road are undergoing extensive erosion due to lack of vegetation on a sandy soil. Additionally, some boundary areas of the landfill have exposed waste due to erosion.

A RFI was completed in FY02. The installation submitted the RFI Work Plan to GAEPD, which was reviewed and approved. The RFI Report was submitted to GAEPD. The state has responded to the report and the installation has responded to their comments.

Access to this site is highly restricted and controlled by the use of a locked entry gate. Thick surrounding vegetation also restricts access to this site.

# (PROPOSED PLAN)

Based on the results of the RFI report, this site has been recommended for no further action.

## (SITE DESCRIPTION

Landfill #8 is located west of the Veterinary Hospital and occupies 14 acres. The landfill was operated from 1961 to 1966 and was operated as a trench and area fill. The landfill is situated in a potentially sensitive area, as it borders the Chattahoochee River, the primary source of drinking water for Columbus and other downstream communities. The slope of the landfill is within 50 meters of the east bank of the river. Documentation detailing waste disposed at this site is not available. The landfill has eroded to the point that garbage is recognizable on the surface and slope of the landfill. Landfill 8 is listed in the installation RCRA part B permit along with all other Fort Benning SWMUs.

The surface and slopes of this landfill have deteriorated significantly and will require maintenance and repair. Although various contaminants were detected in soil and groundwater, all were below their respective screening levels.

#### **STATUS**

RRSE RATING: High

**CONTAMINANTS:** VOCs, Pesticides (associated with Pesti-

cide Area)

MEDIA OF CONCERN:

Groundwater, Sediments, Soil

**COMPLETED IRP PHASE:** 

RFA, RFI

**CURRENT IRP PHASE:** RA

(funded)

**FUTURE IRP PHASE: LTM** 

A geophysical study was conducted and the monitoring of inclinometers for three years (1999-2002) have indicated that the landfill is relatively stable with little movement indicated.

A June 1986 geohydrologic study by USAEHA (#38-26-0905-87) recommended that measures to control erosion be taken at the landfill as well as groundwater monitoring. Limited groundwater monitoring by USAEHA revealed that levels of contamination were well within National Secondary Drinking Water Regulation (NSDWR) levels. A RFI was conducted in FY99 and results were submitted to GAEPD in FY00.

The RFI Report was approved by GAEPD and called for continued groundwater monitoring and slope stabilization monitoring. The pesticide storage formulation area, which is adjacent to Landfill 8, was a continuing source of pesticide contamination in the groundwater. A contaminated soil removal was completed in 1997 at the pesticide storage formulation area and this has reduced the levels of pesticide contamination in the Landfill 8 groundwater. The primary groundwater contaminant was VOCs, which were below MCLs but above RBCs. VOCs were detected in only one of ten monitoring wells.

A Supplemental RFI sampling of soil, sediment, surface water and groundwater was conducted in FY03.

Access to this site is highly restricted and controlled. A locked fence gate prevents access, and the landfill is situated on a high elevation bluff, bounded by a river. The locked gate is the only access to the site. In FY03, steps were taken to control surface erosion, establish a vegetative cover on the landfill, and direct the flow of surface water runoff on the landfill. Monitoring of the inclinometers will continue for the foreseeable future.

## (PROPOSED PLAN)

A Supplemental RFI Report will be submitted to GAEPD in first QTR FY05.

## SITE DESCRIPTION

Landfill 13 is an 85 acre landfill located near the intersection of Marne Road and Cusseta Road. Operations at this landfill were initiated in 1965 and continued until 1983. This landfill was operated as an area fill sanitary landfill and was closed according to its permit. Documentation detailing disposed waste at this site is not available though it is thought that household garbage and industrial wastes (solvents) may have been discarded here.

A December 1987 groundwater study by USAEHA (#38-26-0000875-88) indicated groundwater contamination at the site, recommending that a RCRA facility investigation be performed. A RI/FS was prepared and submitted to GAEPD in 1991. The recommendation from the RFI was preparation of a correction action plan. The Correc-

#### **STATUS**

RRSE RATING: High

**CONTAMINANTS: VOCs** 

**MEDIA OF CONCERN:** 

Groundwater

**COMPLETED IRP PHASE:** 

RFA, IRA, RFI

**CURRENT IRP PHASE: LTM** 

**FUTURE IRP PHASE: LTM** 

tive Action Plan recommended that a RCRA cap was needed at Landfill 13 to contain the soil contamination unit. No action was recommended to specifically address groundwater contamination. A RCRA composite cap was constructed on the landfill in 1995 and completed in 1996. A RFI to investigate groundwater contamination was completed in May of 1997. The recommendation from the RFI was to monitor the groundwater three to five years to evaluate performance of the RCRA cap with respect to impacts to groundwater contamination. GAEPD's comments required preparation and submittal of a corrective action plan.

Groundwater monitoring since 1998 has consistently shown a low level of two contaminants (Vinyl Chloride and Benzene). Both contaminants slightly exceed MCLs in two wells, out of a total of 24 wells. This plume is localized in an area of less than an acre. Surface water sampling has not detected any contaminants above regulatory criteria since start of the monitoring program.

The installation has conducted a risk assessment and submitted a Risk Assessment Report to GAEPD. The Report was approved by GAEPD and recommended continued groundwater monitoring. Results of the risk assessment will be used in preparation of the groundwater corrective action plan.

Runoff from the major catchment areas is controlled by berms and rock flumes. In FY03 an engineering study was conducted to determine the sources and extent of landfill seepage areas, subsidence of landfill cap, integrity of synthetic liner and methane vents. Results of the study showed no impact to the integrity of the cap. Semi-annual groundwater monitoring was completed in FY04. Annual monitoring will continue for a period of three years.

# (PROPOSED PLAN)

A groundwater Corrective Action Plan will be submitted to GAEPD. Performance monitoring will continue for three years. Long term maintenance of the landfill cap and fencing will be conducted for thirty years.

# FORMER PEST MIXING STOR AREA (BLDG 1396) FBSB-86

## (SITE DESCRIPTION)

The former Pesticide Mixing/Storage Area is located west of the intersection of Anderson Avenue and Tenth Division Road on Main Post. The site was the central location for pesticide mixing and storage for all of Fort Benning. As early as 1945, pesticides including DDT, Mirex, Chlordane and Lindane were mixed at this site. According to installation personnel, mixing at this facility was discontinued in the late 1980s though pesticides were stored inside the building until as late as 1993. Sampling and analysis efforts conducted by USAEHA and ABB Environmental Services indicated elevated concentrations of pesticides in the surficial soils surrounding Building 1396. There were three contaminated buildings on-site, which were demolished and removed. The contaminated soil was excavated and removed and chemically oxidized at a TSD facility. Clean soil was used to replace the contaminated soil. A small amount of contaminated soil had to be left in place

#### **STATUS**

**RRSE RATING:** Medium

**CONTAMINANTS:** Pesticides

MEDIA OF CONCERN: Soil,

Groundwater

COMPLETED IRP PHASE: PA/SI,

RI/FS, RD, RA

**CURRENT IRP PHASE:** RIP in

1999 with LTM

FUTURE IRP PHASE: RIP in 1999

with LTM

under a building foundation (Building 267). Should the building be demolished, this amount of pesticides will be removed. Groundwater monitoring has indicated that pesticides are still present in the groundwater at levels below regulatory criteria. A Corrective Action Plan on the groundwater contamination was submitted to the GAEPD. Comments have been received and the installation has responded to comments for the Risk Assessment for the groundwater pathway. The final report for the five year monitoring program has been submitted to GAEPD and comments are pending.

## PROPOSED PLAN

If the groundwater monitoring indicates that remediation goals have been obtained, a request for No Further Monitoring will be made.

# CHEMICAL AGT BURIAL SITE (HARMONY CHURCH) FBSB-87

## (SITE DESCRIPTION)

The Chemical Agent Burial Site is located west of the intersection of Hershey Road, Axton Road, and Jamestown Road in Harmony Church area. This site was identified by the U.S. Army Chemical Materiel Destruction Agency (USACMDA) and is listed on the Nonstockpile Chemical Warfare Materials Site List. Fort Benning personnel discovered that a 1945 U.S. Army Corps of Engineers (USACE) Water Distribution System Map identified an area as "Toxic Agents Buried Here". The site is approximately two wooded acres in size with approximately 12 burial pits.

A RFI performed by ABB Environmental Services found no residual chemical agent contamination in the seven test pits sampled. However, while excavating one of twelve proposed test pits in 1992, 100 glass

#### **STATUS**

RRSE RATING: High CONTAMINANTS:

Chemical Agents

MEDIA OF CONCERN: Soil,

Groundwater

**COMPLETED IRP PHASE: RFA** 

CURRENT IRP PHASE: RFI FUTURE IRP PHASE: LTM

vials from Chemical Agent Identification Sets (CAIS) were discovered. The vials contained dilute solutions of mustard, Lewisite, Phosgene, Chloropicrin, Adamsite, and 2-Chloroacetophenone. During the excavation several of the vials were broken, and two Army Technical Escort Unit personnel required hospitalization. Work at the site was stopped by the Army before the final five test pits could be sampled. Although no residual contaminants were detected during the remedial investigation, the remaining five test pits need to be sampled and the groundwater completely evaluated to determine if the site has been impacted by chemical agents or other contaminants.

Fort Benning has erected a fence around the site. This is a highly restricted site, in a remote area of the installation. The trail leading to this site has a locked gate, and the fence surrounding the site also has a locked gate. "No Trespassing" signs have also been placed on the fence and in the general area. This site is frequently patrolled by Range Control.

Huntsville Corps of Engineers, the lead agent for the Army on UXO and chemical warfare material demilitarization, has been requested to furnish cost estimates and schedules for completing excavations and analysis of remaining test pits. The Safety Submission is currently under review. Field work is scheduled to begin in FY05.

## (PROPOSED PLAN)

Huntsville District COE will prepare appropriate RFI documentation in coordination with the installation and the GAEPD. The RFI will be completed in 2005 and chemical agents will be removed and disposed of in accordance with Army policy. The RI/RA is dependent on the availability of the specialized chemical teams/contractors from Huntsville.

# OLD FIRE TRAINING AREA FBSB-88

## SITE DESCRIPTION

The Old Fire Training Area is located in between Landfill 7 and Landfills 5/6, northeast of Lawson Army Airfield. The site was closed as a firefighting training area prior to 1990. The SWMU was a pit used to train fire fighting personnel to extinguish fires. Fuel was placed in the pit and ignited to provide a source of fire. The site is approximately one acre in size and consisted of a man-made depression surrounded by a small berm. The entire area is surrounded by a fence. There was no concrete basin or impermeable wall to contain unburned fuel.

USAEHA completed a SWMU inspection of this site in July 1994. The results of this study indicate that corrective measures will be required as contaminant levels (BTEX) in both the soil and groundwater fall above EPA guidelines.

#### **STATUS**

**RRSE RATING:** High

**CONTAMINANTS:** POLs, Metals

MEDIA OF CONCERN: Soil,

Groundwater

COMPLETED IRP PHASE: RFA.

RFI

**CURRENT IRP PHASE:** RA(O)

**FUTURE IRP PHASE:** RA(O),

LTM

A RFI was completed in FY02. Results of the RFI indicated limited metals and POL contamination in the immediate vicinity of the Fire Training Pit.

The RFI report was submitted to GAEPD and approved.

# (PROPOSED PLAN)

A Corrective Action Plan will be prepared, which may include oxygen release compound injection (ORC), MNA, LTM, a Baseline Risk Assessment, and site close-out documentation.

# INSTALLATION MOTOR REPAIR SHOP FBSB-91

# SITE DESCRIPTION

The installation motor repair shop is located approximately 700 feet west of the intersection of Anderson Avenue and Tenth Division Road on Main Post. This site is a two acre fenced area with one main building approximately 25,000 square feet surrounded by concrete paved apron used for parking and storage. There are three open storage out buildings. There is one oil water separator on the site. There are several storage building foundations and one oil change grease rack foundation remaining on the site.

The hazardous waste processing and storage practices changed significantly between 1986 and 1991. This was a result of changes in federal regulations regarding storage of hazardous waste, underground storage tank management and requirements for secondary containment of

#### **STATUS**

RRSE RATING: High

**CONTAMINANTS:** Metals

**MEDIA OF CONCERN: Soil** 

**COMPLETED IRP PHASE:** 

**RFA** 

**CURRENT IRP PHASE: RFI** 

(Funded), LTM

**FUTURE IRP PHASE: RC** 

ASTs. Previously, hazardous waste was stored in 55-gallon drums with no containment. However, beginning in 1990 a recycling program was initiated which involved using waste fuels and solvents as fuels for the main post heating plant.

In 1993, a contractor interviewed personnel in preparation for the 1993 IAP update. According to installation personnel, this site has been used as a vehicle maintenance shop since at least 1973. Diesel fuel, carbon cleaner, engine oil, and cleaning solvents were frequently used at the facility. All waste solvents were filtered and reused. Additional wastes generated were stored in 55-gallon drums to await removal and disposal by an outside contractor. Diesel was stored onsite in a 1200-gallon capacity AST with no containment structures until 1991. Presently, diesel fuel is stored onsite in a 600-gallon capacity AST with no secondary containment. No spills at this site have been reported. Nonetheless, because of a lack of appropriate documentation concerning spills and past storage practices, in addition to evidence of visual staining, this site requires further investigation. A RFI report and supplemental Work Plan were submitted to the GAEPD in FY01, and the supplemental field work was completed.

Additional sampling was conducted to delineate soil contamination and provide data for a risk assessment Work Plan. A Supplemental RFI Report was submitted to GAEPD. Comments have been received and the installation has responded. An Addendum to the RFI Report was prepared. Additional soil sampling determined Thallium levels are within localized background levels.

# (PROPOSED PLAN)

The Installation has requested NFA.

# INSTALL TANK RPR/VEH MAINT SHOPS FBSB-93

## (SITE DESCRIPTION)

The Installation Tank Repair/Vehicle Maintenance Shop is located approximately 400 feet east of the intersection of 11th Airborne Division Road and 187th Infantry Regiment Street in the Sand Hill area. The site is approximately two to three acres fenced. In addition to building 3716, the area contains seven separate maintenance shops, an abandoned washrack, an abandoned oil change/grease rack, the foundation of a former large vehicle maintenance shop and unpaved military equipment park.

The visual staining of the concrete and unpaved soil gravel areas, along with stressed vegetation are indication of releases from past disposal practices.

#### **STATUS**

RRSE RATING: High

**CONTAMINANTS:** VOCs, SVOCs

MEDIA OF CONCERN: Soil,

Groundwater

**COMPLETED IRP PHASE: RFA** 

**CURRENT IRP PHASE: RFI** 

(Funded), RA(C)

**FUTURE IRP PHASE: LTM** 

In 1993, a contractor conducted personnel interviews in preparation for the 1993 IAP update. According to installation personnel, repair of combat vehicles and heavy construction equipment have occurred at this site since approximately 1943. Mogas and diesel fuel are stored in two 600-gallon capacity ASTs; hydraulic fluid, oils, thinners, and solvents are stored in 55-gallon drums. Prior to implementation of the installation waste recycling program, waste segregation and proper disposal methods were not implemented. Currently, wastes are segregated and placed in 55-gallon drums and sent to DRMO. Because the potential for improper disposal or accidental releases of hazardous constituents exists, further investigations are recommended for this site.

A Baseline Risk Assessment Work Plan was submitted as a supplement to the RFI Report. Preliminary data from the RFI indicates a risk based approach may be appropriate for closure at this site. GAEPD recently commented on the RFI Report and the Baseline Risk Assessment Work Plan and the Installation responded to comments. A Baseline Risk Assessment Report is currently being prepared for submittal in first QTR FY05.

## PROPOSED PLAN

A Corrective Action Work Plan, including free product removal will be prepared in FY05. This site is a potential candidate for risk-based corrective action. LTM is planned for a period of five years.

# 



The following gas stations are suspected of having the potential for contamination based on the presence of leaking underground storage tanks and vehicle maintenance activities. All sites were referenced in the 1982 Installation Assessment, however, the document did not detail the potential for contamination from each site. Furthermore, site inspections were not conducted in association with this document. The Corps of Engineers, Savannah District, are executing a CAP PART A and CAP PART B for the following sites.

The Site Descriptions for the two ER,A funded Installation Gas Stations begin on the following page.

## INSTALLATION GAS STATIONS (SITE 1) FBSB-94C

### SITE DESCRIPTION

Building 3763 gas station was located approximately 400 feet south of the intersection of 11th Airborne Division Road and 187th Infantry Regiment Street in the Sand Hill area. The building was demolished and nothing remains but the concrete building foundation.

In 1993, a contractor conducted personnel interviews at this site in preparation for the 1993 draft of the IAP. According to installation personnel, each of the three 10,000-gallon capacity USTs, previously containing unleaded gasoline, have been reported as leaking. Soils in the vicinity of the USTs were excavated due to elevated petroleum hydrocarbons detected in subsurface soil samples collected. No groundwater investigation was implemented. In the past, this facility performed general vehicle maintenance (i.e., oil changing). Waste oil generated from these activities was deposited in an UST onsite. The facility is no longer in operation. All USTs, including the waste oil USTs, were removed from the sites in 1992.

#### **STATUS**

**RRSE RATING:** High

**CONTAMINANTS:** VOCs

**MEDIA OF CONCERN:** Ground

water, Surface Water

**COMPLETED IRP PHASE:** 

**RFA** 

**CURRENT IRP PHASE: RFI** 

(Funded)

FUTURE IRP PHASE: RA(O),

LTM

A Corrective Action Plan, Parts A and B with an amendment were submitted to the GAEPD UST Program for review, and we have responded to their comments. This site is also included in the Baseline Risk Assessment. A hotspot delineation was conducted in FY03.



Continue to conduct free product removal and long term monitoring. Dual-Phase extraction of free product will be conducted during FY04.

## INSTALLATION GAS STATIONS (SITE 2) FBSB-94D

## SITE DESCRIPTION

Building 9051 gas station was located at the intersection of Marne Road and Bell Richards Street in the Kelley Hill area.

Three USTs and one OWS were removed in 1997. Contaminated soil was removed and disposed of at that time. The building was demolished in 1998. The area is now an asphalt parking lot for troop billets.

A RFI Work Plan was submitted to GAEPD in May 01. The work commenced on the RFI in the summer of FY01. The RFI Report was completed in FY02. Comments from the GAEPD were received and the installation is in the process of responding. Confirmatory sampling and a RFI Report Addendum was completed and submitted to GAEPD. Responses are pending.

#### **STATUS**

RRSE RATING: High

**CONTAMINANTS:** POL, Thallium

MEDIA OF CONCERN: Soil,

Groundwater

**COMPLETED IRP PHASE: RFA,** 

CS

**CURRENT IRP PHASE: RFI** 

(Funded)

**FUTURE IRP PHASE: RC** 

(PROPOSED PLAN)

The Installation has requested NFA.

Building 9060 (Fuel Point - FBSB-95H) is a military fuel dispensing site and motor pool in the Kelley Hill area of Fort Benning. Two leaking fuel USTs were removed and replaced in the early 1990s. The initial release occurred in the 1980s.

To address the soil and groundwater contamination, a Soil Vapor Extraction/Air Sparging Treatment System was installed in FY01. The system has been operational for a period of one year. We are currently awaiting the most recent monitoring report.

#### **STATUS**

**RRSE RATING:** High

**CONTAMINANTS: POLs** 

**MEDIA OF CONCERN:** 

Groundwater, Soil

**COMPLETED IRP PHASE:** 

RFA, RFI, RA

**CURRENT IRP PHASE:** RA(O)

**FUTURE IRP PHASE:** RA(O),

LTM

## PROPOSED PLAN

A system optimization is currently being evaluated. Operation of the Soil Vapor Extraction/Air Sparging Treatment System will continue for an additional one year followed by a final report and recommendations.

## ABANDONED DRUM DISPOSAL SITE FBSB-97

## (SITE DESCRIPTION

In 1993, Fort Benning personnel discovered a 55-gallon drum disposal site in the Kelley Hill area. The site is located off Marne Road just off the northeastern corner of Essebagger Athletic Field. The site is approximately 1 acre site, heavily wooded, with deep erosion gullies. The site contains approximately twenty 55 gal drums in various states of deterioration. Some of the drums are completely buried, while others lie partially buried rusting on the surface. It is very likely that the damaged drums have leaked POL contaminants into the surrounding soil.

The RFI report with a supplemental RFI Work Plan was submitted in May 01. RFI indicated elevated levels of Thallium in excess of RBCs and background in soils. Thallium results will be reevaluated after collection of additional background samples.

#### **STATUS**

**RRSE RATING:** Medium

**CONTAMINANTS:** Thallium

**MEDIA OF CONCERN: Soil** 

**COMPLETED IRP PHASE: RFA** 

**CURRENT IRP PHASE: RFI** 

(funded), LTM

**FUTURE IRP PHASE: RC** 

Deteriorated drum debris and contaminated soils removal will occur in FY04. Additional confirmatory soil sampling will be conducted to determine if all the contaminated soils have been removed and if Thallium levels are within background levels.

## PROPOSED PLAN

Interim Corrective Measures Report will be submitted upon completion of the field work and analysis. A final RFI Report will be submitted requesting NFA.

Building 223 (Ordnance Shop) is located on Kilgore Street. The site is surrounded by a security fence. Building 223 was first reported in the 1982 Installation Assessment of Fort Benning. Approximately 60 liters per month of solvents from Bldg 223 were reported in the Installation Assessment as being taken to the main heating plant for use as a fuel. The solvent was used for the cleaning of weapons. Typewriters were also cleaned at this facility by means of a chlorinated solvent. Approximately 300-380 liters of solvent was disposed into the sanitary sewer per month. Suspected high potential for leakage of contaminants from the sewer into the groundwater and soil.

The installation RCRA part B permit required a RFI to be performed at this site. The RFI investigation detected groundwater contamination at the Ordnance Shop in the form of chlorinated solvents.

#### **STATUS**

RRSE RATING: High

**CONTAMINANTS:** Chlorinated

Solvents

MEDIA OF CONCERN: Soil,

Groundwater

**COMPLETED IRP PHASE: RFA,** 

RFI, IRA

**CURRENT IRP PHASE:** RA(C)

**FUTURE IRP PHASE: LTM** 

Tetrachloroethene, Trichloroethene and cis-1,2,-Dichloroethene were detected above EPA risk based screening levels for tap water. Concentrations of toluene and the above listed compounds, above regulatory levels, were also found in the subsurface soils.

A RFI Report was sent to GAEPD for review and comment in January 2000. Further investigation of groundwater, soils and sediments was recommended at this site in order to better delineate the extent of contamination. A Baseline Risk Assessment was requested at this site.

Based on the results of the RFI, concentrations of TCE were found in downgradient groundwater monitoring wells in excess of the standard of 5 PPB. A Supplemental RFI was conducted at this site in conjunction with FBSB-26 and FBSB-64. FBSB-99 is likely to be a primary source of groundwater contamination at all three sites (FBSB-26, FBSB-64, and FBSB-99). Tetrachloroethene and cis-1,2,-Dichloroethene were also found in the groundwater at FBSB-99.

Interim Corrective Measures and soil removal (~3000 cy) was completed during FY04. The Interim Corrective Measures report will be submitted to GAEPD.

### (PROPOSED PLAN)

A future Corrective Action Plan may include MNA. LTM for approximately four years will be required.

## MMRP Site Description

#### FTBN-001-R-01 - GRENADE MUNITIONS BURIAL SITE

During the excavation of a basement for new Ranger Barracks, located in the main cantonment area of Fort Benning, hand and rifle grenades were discovered buried eight to ten feet deep. The burial site was located near a former ammunition storage/supply facility that had been removed at an earlier date. The 789<sup>th</sup> Ordnance Company (Explosives Ordnance Disposal) responded and removed those items that were visible.

Six composite soil samples were collected from the bottom of the excavated site, and five composite soil samples from soil that had been removed and stockpiled. The soil samples were analyzed for total metals, mercury solid, and nitroaromatics and nitroamines (EPA Method 8330) by ECOSYS, an approved laboratory. All constituents were either below Region 9 PRGs for residential sites or below reporting limits in all the samples analyzed. There are no COPCs associated with this site.

This specific site underwent a thorough investigation with geophysical detection equipment during the original removal operation, and it is extremely unlikely that any DMM remains. It is believed that the DMM was confined to the 15m x 5m x 3m excavated area. It is Fort Benning's position that all DMM were successfully removed from this site. However, other sites have been identified which may contain buried munitions. The sites will require a site inspection and possibly a site investigation.

# 2005 IAP

## Fort Benning ER,A Response Complete Site Descriptions

## GENERAL PURPOSE MAG (PARKS RANGE) FBSB-29

## (SITE DESCRIPTION)

Building 154 is located at the southern end of Albanese Street on Main Post. The site consists of a bunker used for storage of small arms ammunition for the U.S. Army Marksmanship Unit. The bunker has been used for at least 25 years. According to installation personnel, no solvents, chemicals, or oils have been stored at the site. No releases at the site have been reported.

The 1992 preliminary site inspection for Fort Benning reported no contamination. Based on these findings, no further investigation is recommended for this site. Additionally this is an active site and does not qualify for funds under the IRP.

#### **STATUS**

**RRSE RATING:** NE

**CONTAMINANTS:** Unexploded

Ordnance

MEDIA OF CONCERN: None COMPLETED PHASE: RFA

**CURRENT PHASE: RC** 

**RC DATE:** 199201

## EXCHANGE SERVICE OIL (BLDG 1624 & 1625) FBSB-41

### SITE DESCRIPTION

The Exchange Service Oil is located southeast of the intersection of Marchant Street and Edwards Street on Main Post. Building 1624 is an auto supply store with oil changing capabilities. According to installation personnel, no antifreeze or solvents are handled at this facility. Waste oil is deposited in an AST located in Building 1623. The AST is situated on a concrete slab and is bermed. Visual staining in the vicinity of the AST was noted during a site visit. However, it was determined that these facilities were active sites and did not qualify under the ER,A Program. Both sites are currently being investigated by the installation using OMA funding. As a result no further action is planned for these buildings under the IRP Program.

No further action is planned for these sites under the DERP IRP.

#### **STATUS**

**RRSE RATING: NE** 

**CONTAMINANTS: POL, POL** 

Sludge

MEDIA OF CONCERN: Soil

**COMPLETED PHASE: RFA** 

**CURRENT PHASE: RC** 

The ammunition storage facility is located on First Division Road across the street from Building 6000, and consists of 19 earth covered bunkers and five above ground bunkers. The site covers approximately 240 acres and is completely fenced and restricted to authorized personnel only. According to installation personnel, the bunkers are used as a magazine storage area. No solvents, chemicals, or oils have been stored at the site. A 1,000-gallon capacity UST containing unregulated heating fuel has been removed from the site. The 1992 Installation Assessment of Fort Benning does not mention this site by name though it does analyze activities related to ammunition storage.

Since there is no indication that a release has occurred at this site and because the UST removal is presently covered under Fort Benning's UST program, no further remedial actions are planned for this site under the IRP program.

#### **STATUS**

**RRSE RATING: NE** 

CONTAMINANTS: Ordnance Components, Unexploded Ordnance MEDIA OF CONCERN: Soil,

Groundwater

**COMPLETED PHASE:** RFA

**CURRENT PHASE: RC** 

**RC DATE:** 199208

## PESTICIDE MIXING STORAGE (BLDG 266) FBSB-60

## SITE DESCRIPTION

Building 266 is located approximately 700 feet west of the intersection of Anderson Avenue and Tenth Division Road on Main Post. The 1982 Installation Assessment referenced this site as having had an inadequate mixing facility, though this problem has since been corrected. An USAEHA study of the site revealed problems related to the mixing of pesticides; nonetheless, no contamination was noted.

A contractor, in preparing the 1993 IAP, interviewed installation personnel. According to these interviews, this building has been used since the early 1980s to mix and store pesticides for use throughout the installation. Washwater in the building flows via gravity to a collection sump where it is subsequently passed through a carbon filtration treatment

## STATUS

**RRSE RATING:** NE

**CONTAMINANTS:** Pesticides

MEDIA OF CONCERN: Soil,

Groundwater

**COMPLETED PHASE:** RFA

**CURRENT PHASE: RC** 

**RC DATE:** 199201

system. The filtered water is then stored in an AST located inside the building. Tank contents are reused as pesticide dilution water on an as needed basis. There are no mixing or rinse areas outside the building. No spills at the site have been reported.

The facility is currently an active pesticide mixing site. Based on the fact that this site is an active site, no further investigation under the IRP is planned.

## BLDG 492 - PCB SPILL FBSB-61

## (SITE DESCRIPTION)

Building 492 is located just south of the intersection of Anderson Avenue and Tenth Division Road on Main Post. The area just west of this building was used since the 1940s as an unpaved transformer storage yard. According to installation personnel, in 1981 approximately 300 transformers were removed from the site and the top 18 inches of soil was excavated and placed in 265 55-gallon drums. According to the 1982 Installation Assessment, EPA took samples at the site in 1979 and found polychlorinated biphenyl (PCB) concentrations ranging from 5 to 41,000 milligrams per kilogram. Because of this, soil was excavated until no visual staining was evident. Nonetheless, no soil sampling and analysis was conducted during the removal effort. In approximately 1984,

#### **STATUS**

**RRSE RATING: NE** 

**CONTAMINANTS:** PCBs

MEDIA OF CONCERN: Soil,

Groundwater

**COMPLETED PHASE:** RFA

**CURRENT PHASE: RC** 

**RC DATE:** 199201

Building 1737 was built at this location to store batteries, (PCB) containing transformers, and ballasts for DRMO. Because remedial efforts previously conducted onsite were not proven to be complete via verification sampling and analysis, there is a potential that contamination persists onsite.

It has been determined that this site was mistakenly identified as a ER,A site and does not qualify under the ER,A program as an IRP site. No further action under the ER,A program is planned.

## BATTERY RESTORATION (BUILDING 1751) FBSB-62

## SITE DESCRIPTION

Building 1751 is located just northeast of the intersection of Vibbert Avenue and Dilboy Street on Main Post. Battery restoration is located in the northwest corner of the building. The 1982 Installation Assessment indicated that this site was used for battery repair and restoration. Approximately 190 to 380 liters of waste battery electrolyte per year were neutralized with anhydrous ammonia in a basin behind the building and then discharged to the sanitary sewer. In 1983 the soil beneath the acid neutralization unit was removed and replaced to correct contamination from a ruptured line connecting the neutralization system to the sanitary sewer. The neutralization system was rebuilt in 1984 but was never used again.

#### STATUS

**RRSE RATING:** NE

**CONTAMINANTS:** Acids

MEDIA OF CONCERN: Soil.

Groundwater

**COMPLETED PHASE: RFA** 

**CURRENT PHASE: RC** 

**RC DATE: 199507** 

In developing the 1992 IAP, a contractor interviewed installation personnel at the site. According to these interviews, used batteries are either turned into DRMO or filled with electrolytes and reissued. Electrolytes are stored in 55-gallon drums outside the building on a pad. No crushing, cleaning, or bulk storage of used batteries is conducted at the facility. A site inspection of the facility by Fort Benning personnel conducted in August of 1993 confirmed this information.

Because no spills have been reported at this location and since there is no evidence of contamination, no further remedial actions under the IRP Program are planned for this site.

Landfill #1 is located near the intersection of Edwards Street and Tenth Division Road on Main Post. This site was active in early 1942 and covers an area of approximately three acres. Documentation detailing waste disposed at this site is available, though it was a trench-type landfill. This landfill is presently occupied by propane ASTs. Boundaries of the landfill could not be verified during the site visit. The geohydrologic study (#38-26-0875-88) prepared by the U.S. Army Environmental Hygiene Agency (USAEHA) for Landfill No. 1 found no soil or groundwater contamination.

Because the USAEHA geohydrologic study found no evidence of soil or groundwater contamination, no further response is planned at this site. The state of Georgia has concurred with this evaluation.

#### **STATUS**

**RRSE RATING: NE** 

**CONTAMINANTS:** Metals

MEDIA OF CONCERN: Soil,

Groundwater, Air

COMPLETED PHASE: RFA

**CURRENT PHASE: RC** 

**RC DATE:** 199201

# LANDFILL NO. 3 FBSB-65

### SITE DESCRIPTION

Landfill #3 is located south of the Officer's Club, Main Post, on what is currently Gleen Field. It is bounded by Ingersoll Road on the west, Faith Elementary School on the south, and Bachelor Officer Quarters (BOQs) and married officers housing on the east. This landfill operated from 1945 to 1949 and covers approximately 36 acres. Documentation detailing disposed waste is not available.

The USAEHA Geohydrologic Study (No. 38-26-0817-88) indicated that no groundwater contamination had resulted from past onsite disposal practices. Therefore, no further investigations are recommended at this site. The state of Georgia has concurred with this evaluation.

#### **STATUS**

**RRSE RATING:** NE

CONTAMINANTS: Metals, Chlorinated Solvents, Non-Chlorinated Solvents

MEDIA OF CONCERN: Soil,

Groundwater, Air

**COMPLETED PHASE: RFA** 

**CURRENT PHASE: RC** 

## LANDFILL NO. 9 FBSB-71

### SITE DESCRIPTION

Landfill #9 is located southwest of Lawson Army Airfield. The landfill, which was operated in 1961 and again in 1969-1970, covers approximately 15 acres. Documentation detailing disposed waste at this site is not available. The USAEHA Geohydrologic Study (No. 38-26-0817-88) prepared for Landfill Nos. 3, 9, 18, and 20 indicated that no groundwater contamination had resulted from past onsite disposal practices. Therefore, based on available site information, no further investigations are recommended at this site.

Based on the results of the USAEHA groundwater study, no further action is planned for this site.

#### **STATUS**

**RRSE RATING: NE** 

CONTAMINANTS: Chlorinated Solvents, Non-Chlorinated Solvents MEDIA OF CONCERN: Soil,

Groundwater, Air

**COMPLETED PHASE:** RFA, RFI

**CURRENT PHASE: RC** 

**RC DATE:** 198803

## LANDFILL NO. 10 FBSB-72

## SITE DESCRIPTION

Landfill #10 is located near the Kelley Hill area, north of Marne Road, across the road from a battalion vehicle maintenance facility. The landfill was operated as a trench type landfill from 1959 to 1963. The approximate area of the landfill is six acres. Documentation detailing disposed waste at this site is not available.

The USAEHA Geohydrologic Study (No. 38-26-0818-87) prepared for Landfill 10 indicated that additional groundwater samples should be collected to confirm the levels of pentachlorophenol detected at these two sites. Additional sampling failed to find any evidence of pentachlorophenol contamination, however the state disagreed with the detection method that was used for analysis and directed that additional sampling with a specific EPA method be conducted. The RCRA part B permit required an RFI be conducted.

#### **STATUS**

**RRSE RATING:** Medium

**CONTAMINANTS:** Metals,

Chlorinated Solvents, Non-Chlorinated

Solvents

MEDIA OF CONCERN: Soil,

Groundwater, Air

COMPLETED IRP PHASE: RFA,

RFI

**CURRENT IRP PHASE: RC** 

**RC DATE: 200107** 

The RFI was conducted at this site in FY99 and submitted to the state. The results of the investigation indicated that no contaminants above screening levels were found in groundwater. Also none of the compounds found in landfill soils or downgradient sediment samples exceeded the risk based screening criteria. The RFI Report recommended No Further Action, and was approved by the state.

Landfill #11 is located along the western side of Marne Road, north of the Kelley Hill area. The landfill, which operated from 1963 to 1965, covers approximate 11 acres. Documentation detailing disposed waste at this site is not available, however household garbage including rusted cans, bottles and other trash was observed in a 1987 USAEHA investigation. The site is presently in a heavily wooded area.

Neither the 1994 USAEHA SWMU investigation nor the 1987 USAEHA geohydrologic study (#38-26-0875-88), found significant groundwater contamination at this site. National Primary Drinking Water Standards were not exceeded by any analytical parameter. As a result, no further remedial action is planned for this site.

#### **STATUS**

**RRSE RATING: NE** 

**CONTAMINANTS:** Metals, Non-Chlorinated Solvents

MEDIA OF CONCERN: Soil,

Groundwater, Air

**COMPLETED PHASE: RFA, RFI** 

**CURRENT PHASE: RC** 

**RC DATE:** 198906

## LANDFILL NO. 12 FBSB-74

### SITE DESCRIPTION

Landfill 12 is located west of Old Cusseta Highway and northeast of Victory Drive. It was operated as a trench type landfill from 1954 to 1959 and occupies approximately 15 acres. This area was reforested following closure in 1959, and trees of appropriate size were harvested in late 1986. The ground surface was generally undisturbed in the process and no waste was uncovered. The types of wastes placed in the landfill were not recorded. The USAEHA Geohydrologic Study (No. 38-26-0816-87) prepared for Landfill Nos. 12, 14, and 15 indicated that no groundwater contamination had resulted from past onsite disposal practices.

Based on the available site information and the USAEHA SWMU Investigation and groundwater studies, no further action is recommended at this site.

#### **STATUS**

**RRSE RATING: NE** 

**CONTAMINANTS:** Metals,

Chlorinated Solvents, Non-Chlorinated

Solvents

MEDIA OF CONCERN: Soil,

Groundwater, Air

**COMPLETED PHASE: RFA, RFI** 

**CURRENT PHASE: RC** 

## LANDFILL NO. 14 FBSB-76

### SITE DESCRIPTION

Landfill #14 lies southeast of Landfill 15 and north of active Landfill 13, close to the Ochillee Creek. The landfill was operated as a trench type landfill from 1950 to 1953. The types of wastes placed in the landfill were not recorded. The approximate area of the landfill is 8 acres. The USAEHA Geohydrologic Study (No. 38-26-0816-87) prepared for Landfill Nos. 12, 14, and 15 indicated that no groundwater contamination had resulted from past onsite disposal practices, although concentrations of DDT were found in upgradient groundwater monitoring wells indicating that the contamination source is off site.

Even though no action is planned at landfill 14, GAEPD has directed the installation to determine the source of DDT groundwater contamination upgradient of this site. This will done using OMA not ER,A funding.

#### **STATUS**

**RRSE RATING: NE** 

**CONTAMINANTS:** Metals,

Chlorinated Solvents, Non-Chlorinated

Solvents

MEDIA OF CONCERN: Soil,

Groundwater, Air

**COMPLETED PHASE: RFA, RFI** 

**CURRENT PHASE: RC** 

**RC DATE:** 198708

## LANDFILL NO. 15 FBSB-77

### SITE DESCRIPTION

Landfill #15 is located near the intersection of Old Cussetta Highway and Marne Road. The site was operated as a trench-type landfill from 1953 to 1954, occupying approximately 11 acres. The type of wastes placed in the landfill were not recorded. The USAEHA Geohydrologic Study (No. 38-26-0816-87) prepared for Landfill Nos. 12, 14, and 15 indicated that no groundwater contamination had resulted from past onsite disposal practices.

Based on the results of the USAEHA groundwater study and the 1994 SWMU investigation, no further investigations are planned at this site.

#### **STATUS**

**RRSE RATING:** NE

**CONTAMINANTS:** Metals, Non-Chlorinated Solvents

MEDIA OF CONCERN: Soil,

Groundwater, Air

**COMPLETED PHASE: RFA, RFI** 

**CURRENT PHASE: RC** 

Landfill #16 is located between Hibbs Range and Range Area A-4, just south of Main Post. The portion of the bermed area suspected to be the landfill is about 60 feet by 700 feet. The approximate area of the site is one acre. The landfill was reportedly operated during 1952. The berm is presently 8 to 10 feet wide at the top and elevated approximately 10 feet above ground surface. Documentation detailing waste disposed at this site is not available. According to the USAEHA Geohydrologic Study (38-26-0867-88) performed at Landfill Nos. 16 and 19, recommendations were made to install and sample two additional groundwater monitoring wells at Landfill 16. According to DFEL personnel, these additional monitoring wells were installed and, based on analytical results, no elevated contaminant levels were detected.

#### **STATUS**

**RRSE RATING: NE** 

**CONTAMINANTS:** Metals, Non-Chlorinated Solvents

MEDIA OF CONCERN: Soil.

Groundwater, Air

**COMPLETED PHASE: RFA, RFI** 

**CURRENT PHASE:** RC

**RC DATE:** 198711

Based on the fact that National Primary Drinking Water Standards were not exceeded by any analytical parameter during USAEHA testing in 1987, no further investigations are recommended at this site.

# LANDFILL NO. 18 FBSB-80

## SITE DESCRIPTION

Landfill #18 is located west of the Main Post boiler plant between Riordon and Lavoie Streets. The surface of the landfill is now occupied by a parking lot. The landfill covers approximately 3 acres and the date of operation is unknown. Documentation detailing waste disposed at this site is not available. The USAEHA Geohydrologic Study (No. 38-26-0817-88) prepared for Landfill Nos. 3, 9, 18, and 20 indicated that no groundwater contamination had resulted from past onsite disposal practices.

Based on the results of the 1987 USAEHA Geohydrologic Study and the 1994 USAEHA SWMU investigation, no further actions are planned for this site.

#### **STATUS**

**RRSE RATING: NE** 

**CONTAMINANTS:** Metals,

Chlorinated Solvents, Non-Chlorinated

Solvents

MEDIA OF CONCERN: Soil.

Groundwater, Air

**COMPLETED PHASE:** RFA, RFI

**CURRENT PHASE: RC** 

## LANDFILL NO. 19 FBSB-81

### SITE DESCRIPTION

Landfill 19 is located north of Eighth Division Road and west of Wood Road in the Harmony Church area. The approximately 6 acre landfill was reportedly operated from March 1969 to September 1973. Documentation detailing waste disposed at this site is not available. Currently, the site is a flat field occupied by a jogging track. The USAEHA Geohydrologic Study (No. 38-26-0867-88) prepared for Landfill Nos. 16 and 19 indicated that no groundwater contamination had resulted at Landfill No. 19 from past onsite disposal practices.

Based on the results of the USAEHA Geohydrologic Study and the 1994 SWMU investigation, no further investigations are recommended at this site.

#### STATUS

**RRSE RATING: NE** 

**CONTAMINANTS:** Metals, Non-Chlorinated Solvents

MEDIA OF CONCERN: Soil,

Groundwater, Air

**COMPLETED PHASE: RFA. RFI** 

**CURRENT PHASE: RC** 

**RC DATE:** 198711

## LANDFILL NO. 20 FBSB-82

### SITE DESCRIPTION

Landfill #20 was uncovered during construction of the credit union building (Building 2786). The debris, reportedly approximately 30 feet deep at one time, was removed and relocated in 1978. There are no other records detailing waste disposed, dates used, or approximate size of this landfill. The USAEHA Geohydrologic Study (No. 38-26-0817-88) prepared for Landfill Nos. 3, 9, 18, and 20 indicated that no groundwater contamination had resulted from past onsite disposal practices.

Based on available site information, and because the landfill debris was removed and relocated, no further investigations are planned at this site.

#### **STATUS**

RRSE RATING: NE

**CONTAMINANTS:** Metals,

Chlorinated Solvents, Non-Chlorinated

Solvents

MEDIA OF CONCERN: Soil,

Groundwater, Air

**COMPLETED PHASE:** RFA, RFI

**CURRENT PHASE: RC** 

Landfill #21, is located on Main Post and is south of Landfill No. 2. It was discovered during construction of the Infantry Training Center, Building 4. The USAEHA Geohydrologic Study (No. 38-26-0833) prepared for Landfill Nos. 2 and 21 indicated that no groundwater contamination had resulted from past onsite disposal practices.

Based on available site information, and the fact that no groundwater contamination is occurring, no further actions or investigations are planned for this site.

#### **STATUS**

**RRSE RATING:** Low

**CONTAMINANTS:** Metals,

**Chlorinated Solvents** 

MEDIA OF CONCERN: Soil,

Groundwater, Air

**COMPLETED PHASE: RFA, RFI** 

**CURRENT PHASE: RC** 

**RC DATE:** 199507

# LANDFILL NO. 23 FBSB-85

### SITE DESCRIPTION

Landfill #23 is a landfill located east of First Division Road and northeast of Victory Drive. The landfill covers approximately 1 acre and was a trench-type landfill; its exact boundaries were never determined. According to a December 1987 study performed by the USAEHA (#38-26-0975-88), this landfill has levels of contamination that fall well within National Primary Drinking Water Regulation (NPDWR) standards though severe erosion was observed on the site.

Since the USAEHA groundwater study indicated that contamination levels were within NPDWR standards and the 1994 SWMU investigation confirmed this, no further actions are planned for this site.

#### **STATUS**

RRSE RATING: NE

**CONTAMINANTS:** Metals,

Chlorinated Solvents, Non-Chlorinated

Solvents

MEDIA OF CONCERN: Soil,

Groundwater, Air

**COMPLETED PHASE:** RFA, RFI

**CURRENT PHASE: RC** 

## LF ADJACENT TO TOXIC AGENT BURIAL SITE FBSB-89

## SITE DESCRIPTION

This landfill is located approximately 600 feet southwest of the intersection of Hershey Road, Axton Road, and Jamestown Road in Harmony Church. This landfill was identified during the investigation of the Chemical Agent Burial Site (FTBENN-040).

This landfill was reportedly active in the 1940s. There are no other records detailing waste disposed, dates used, or approximate size of this landfill. Water quality data from a 1993 USAEHA investigation indicate that this landfill is not a source of groundwater contamination.

Based on the findings of the 1993 USAEHA water quality investigation and the recently completed SWMU, no further action is planned for this site under the IRP.

#### **STATUS**

**RRSE RATING: NE** 

**CONTAMINANTS:** Solvents,

Metals

MEDIA OF CONCERN: Soil,

Groundwater

**COMPLETED PHASE: RFA** 

**CURRENT PHASE: RC** 

**RC DATE: 199506** 

## LF, NORTH END AT MASSEY RD FBSB-90

### SITE DESCRIPTION

This site is an abandoned landfill in the northwest corner of Fort Benning, between Massey Road and Tenth Armored Division Road. The landfill was probably operated from the late 1930s to the early 1940s. Indications are that mess hall waste was disposed of in this landfill. This site was included in the 1994 USAEHA SWMU Investigation which determined that no evidence of a release of hazardous constituents existed at this site.

The installation decided to conduct an RFI on this site in 1997 using OMA funding. No further action is planned at this site under the IRP.

#### **STATUS**

**RRSE RATING:** NE

**CONTAMINANTS:** Metals,

Solvents

MEDIA OF CONCERN: Soil,

Groundwater

COMPLETED PHASE: RFA

**CURRENT PHASE: RC** 

The Installation Flammable Materials Storage is located approximately 800 feet northwest of the intersection of Vibbert Avenue and Edwards Street on Main Post.

In 1993, a contractor conducted personnel interviews in preparation for the 1993 IAP update. According to installation personnel, this site has been used for storage of dry and wet chemicals, acids, and non-lead based paints since at least 1973. Past waste practices at the site are unknown. Currently, all wastes are sent to the hazardous waste landfill.

The 1982 installation assessment did not make specific recommendations about contamination related to this specific site nor did it give any information about potential releases at the site.

#### **STATUS**

**RRSE RATING: NE** 

**CONTAMINANTS: POL, POL** 

Sludge, Solvents

MEDIA OF CONCERN: Soil,

Groundwater

**COMPLETED PHASE: RFA** 

**CURRENT PHASE: RC** 

**RC DATE:** 199507

Based on personal investigation and the lack of any discernible evidence of contamination, the probability that contamination exists at this site is small. Therefore no further action is planned under the IRP.

## MAIN MALL SERVICE STATION FBSB-96

### SITE DESCRIPTION

This AAFES gas station is located approximately 1300 feet east of the intersection of Santa Fe Road and Marne Road in the Bouton Heights area. According to installation personnel, piping associated with three of the nine 10,000-gallon capacity USTs was replaced in December 1991. Soils in the vicinity of the piping were excavated due to elevated petroleum hydrocarbons detected in subsurface soil samples collected. The Corrective Action Plan was prepared in October 1990 and indicated that soil and groundwater contamination were present onsite as a result of leaking lines. The GAEPD gave a verbal directive to proceed with the site cleanup based on the timeline listed in the CAP.

The GAEPD UST regulation changed in 1994 and 1995 in accordance with federal UST regulation changes. These changes required additional investigations and submission of reports to the Georgia UST management program. The CAP part A was completed in 1994. The CAP part B was completed in 1996. Approval of the CAP part B remedial design was received in December 1996.

Air Sparging and Soil Vapor Extraction were completed along with a Supplemental ORC injection. The installation anticipates completion of the closure report in FY03. Recent sampling results indicate that all groundwater monitoring wells show concentrations of BTEX below the regulatory limit of 71.28 ug/l of Benzene. The most recent sampling event took place in the summer of FY03. This site was designated NFA by GAEPD in Nov 2003.

#### **STATUS**

RRSE RATING: Medium

CONTAMINANTS: BTEX

MEDIA OF CONCERN:

Groundwater

**COMPLETED IRP PHASE: PA/SI,** 

RI/FS, RD, RA, RA(O)

**CURRENT IRP PHASE: RC** 

## SOIL CONTAMINATION AT STOCKADES FBSB-98

## (SITE DESCRIPTION)

The Fort Benning stockade, (Building 214), is located at the intersection of Edwards and Wold Streets in the main post area. The site is approximately 150 feet by 150 feet. In December of 1993, members of Fort Benning's Engineering Division surveyed the site in preparation for future building renovations/construction. In doing so, they noted extensive POL contamination in the soil beneath a gravel parking area. Apparently, oil had been spread in the parking area to control dust. Many years later this area was covered with gravel. Additionally, the smell of solvents coming from a concrete pit was noted. Conversations with stockade personnel indicated that the Military Police may have cleaned their weapons within the pit.

#### **STATUS**

**RRSE RATING:** High

**CONTAMINANTS: POL** 

**MEDIA OF CONCERN:** 

Groundwater

**COMPLETED IRP PHASE: RFA.** 

**RFI** 

**CURRENT IRP PHASE: RC** 

**RC DATE:** 200403

An abandoned underground storage tank that contained diesel fuel was present at the site although there is currently no evidence that it leaked. A RFI conducted in FY99 detected POL contamination in soil samples and Tetrachloroethene levels which exceeded MCLs in some groundwater samples. Supplemental groundwater sampling was conducted in FY00 and did not detect any Tetrachloroethene. A supplemental RFI report has been completed and submitted.

The site is surrounded by adjoining sites with potential contamination from POLs and solvents. These sites range from 100 to 200 feet from FBSB-98.

Additional monitoring wells, which were installed upgradient, have determined the source of the contamination is from the upgradient AAFES gas station. Additional monitoring wells were also installed downgradient to further delineate the plume.

As a result of the RFI, it was determined that this site is not the source of POL contamination. GAEPD agreed that this site requires No Further Action (NFA).



## PAST MILESTONES

#### 1982

• IRP Assessment Initiation - July

#### 1987

• USAEHA Geohydrologic Surveys completed for all documented landfills - Dec.

#### 1992

• Installation Preliminary Assessment - Jan.

#### 1994

- IRA Removal of USTs Oct.
- RCRA Facility Assessment Dec.

#### 1996

- RD Complete design for Main Mall March
- RD Complete design for Former Pesticide Storage Area - June
- LTM Begin groundwater monitoring at landfills 7 and 8 July
- RA Begin construction at Main Mall Nov.
- CAPs for UST sites completed Nov.

#### 1997

- RA Begin remediation of Pesticide Storage Formulation Area Feb.
- LTM Begin groundwater monitoring of landfills 4 and 10 and 13 March
- RA Completed Cap on Landfill 13 August

#### 1998

- RA Complete remediation at Former Pest Storage Formulation Area March
- RA Complete construction of SVE system at Main Mall March
- O&M Begin SVE at Main Mall May
- LTM Begin LTM at Pesticide Storage Feb.
- RFI Begin RFI Install Tank Repair Shop Nov.

#### 1999

- RFI Begin RFI at Stockade August
- RFI Begin RFI at Ordnance Shop August
- RFI Begin RFI at Landfill 8 August

#### 2000

- RFI Begin RFI at Eng Field Maint Shop Jan.
- RFI Begin RFI at Instal Paint Facilities Jan.
- RFI Begin RFI at Landfill 4 Feb.
- RFI Begin RFI at Abandoned Drum Site Feb.
- RFI Begin RFI at Instal Motor Repair Shop March

#### 2002

- RFI Begin RFI at Old Fire Training Area Jan.
- RFI Begin RFI at Landfill 5 Jan.
- RFI Begin RFI at Landfill 6 Jan.

#### 2003

- RFI Begin Supplemental RFI at Landfill 6.
- RFI Begin Supplemental RFI at Landfill 5.
- RA(O) at Bldg. 9060.
- RFI Begin Supplemental RFI at Ordnance Shop.
- RFI Supplemental RFI at Landfill 2.

#### 2004

- RA Begin Drum Removal at Abandoned Drum Disposal Site.
- LTM Begin LTM at Landfill 8 Jan.
- RA(C) Begin Corrective Action Plan for Eng Field Main Shop
- RA(C) Begin Corrective Action Plan for Landfill 6
- RFI Begin Corrective Action Plan for Landfill 13
- LTM Begin LTM for Pesticide Storage Facility
- RFI Begin RFI at Chemical Agent Burial Site
- RFI Begin Corrective Action Plan for Old Fire Training Area
- RA(C) Begin RA(C) phase for Installation Gas Stations



### PROJECTED MILESTONES

#### 2005

- LTM Installation Maintenance Repair Shop
- LTM Begin LTM at the Fixed Laundry Facility
- LTM Begin LTM at the Installation Paint Facilities
- LTM Begin LTM at Landfill 2
- LTM Begin LTM at Landfill 4
- LTM Begin LTM at Landfill 7
- RA(C) Begin RA(C) at the Old Fire Training Area
- RA(O) Begin RA(O) at Installation Gas Stations
- RA(O) Begin RA(O) at Leaking UST sites
- RA(C) Corrective Action Plan for the Ordnance Shop
- LTM Abandoned Drum Disposal Site

#### 2006

- RA(O) Begin RA(O) at Landfill 6
- LTM Begin LTM at Chemical Agent Burial Site
- RA(C) Begin RA(C) at Installation Tank Repair Shop
- LTM Begin LTM at Ordnance Shop
- LTM Begin LTM at Installation Tank Repair Shop

#### 2007

- LTM Begin LTM at the Eng Field Maint Shop
- LTM Begin LTM at the Old Fire Training Area
- LTM Begin LTM at Leaking USTs

Year of IRP Completion of all RA: 2005 Year of IRP Completion of IRP: 2010

### NO FURTHER ACTION SITES

FBSB-29	General Purpose Mag (Parks Range)
FBSB-41	Exchange Service Oil (Bldg 1624-1625)
FBSB-52	Ammo Storage (Bldg 5962 thru 5988)
FBSB-60	Pesticide Mixing Storage (Bldg 266)
FBSB-61	Bldg 492 - PCB Spill
FBSB-62	Battery Restoration (Building 1751)
FBSB-63	Landfill No. 1
FBSB-65	Landfill No. 3
FBSB-71	Landfill No. 9
FBSB-72	Landfill No. 10
FBSB-73	Landfill No. 11
FBSB-74	Landfill No. 12
FBSB-76	Landfill No. 14
FBSB-77	Landfill No. 15
FBSB-78	Landfill No. 16
FBSB-80	Landfill No. 18
FBSB-81	Landfill No. 19
FBSB-82	Landfill No. 20
FBSB-83	Landfill No. 21
FBSB-85	Landfill No. 23
FBSB-89	LF Adjacent to Toxic Agent Burial Site
FBSB-90	LF, North End at Massey Rd
FBSB-92	Installation Flam Matl Stge

Main Mall Service Station

Soil Contamination at Stockades

FBSB-96

FBSB-98

## Fort Benning Installation Action Plan Schedule Chart

(based on Cost to Complete current funding constraints)

AEDB-R#	Site Name	RRSE	Phase	FY05	FY06	FY07	FY08	FY09	FY10	FY11+
FBSB-26	Fixed Laundry (Bldg 2500)	High	LTM							
FBSB-39	Eng Field Main Shop (Bldg 377)	High	RA(O) LTM							
FBSB-54	Installation Paint Facilities (8)	High	LTM							
FBSB-64	Landfill No. 2	Med	LTM							
FBSB-66	Landfill No. 4	Med	LTM							
FBSB-68	Landfill No. 6	Med	RI/FS RA(C) RA(O) LTM							
FBSB-69	Landfill No. 7	High	LTM							
FBSB-70	Landfill No. 8	High	LTM							
FBSB-75	Landfill No. 13	High	LTM							
FBSB-86	Former Pest Mixing Stor Area (Bldg 1396)	Med	LTM							
FBSB-87	Chemical Agt Burial Site (Harmony Church)	High	RI LTM							
FBSB-88	Old Fire Training Area	High	RA(O) LTM							
FBSB-91	Installation Motor Repair Shop	High	LTM							
FBSB-93	Install Tank RPR/Veh Maint Shops	High	RA(C) LTM							
FBSB-94	Installation Gas Stations	High	RA(O) LTM							
FBSB-95	Leaking USTs	High	RA(O) LTM							
FBSB-97	Abandoned Drum Disposal Site	Med	LTM							
FBSB-99	Ordnance Shop	High	RA(C) LTM							

Fort Benning - Installation Action Plan

## **Remediation Activities**

Though many restoration sites were reported in both the 1982 and the 1992 Installation Assessments of Fort Benning, neither document presented site investigations to verify the presence or absence of contamination. Furthermore, both documents were based on very limited literature surveys. In general, these documents do not provide detailed descriptions or investigation of contaminated sites. For this reason, Fort Benning included many of its sites in the SWMU Investigation which was performed by the USACHPPM in December 1994. The results of this SWMU Investigation have provided appropriate documentation fulfilling the requirements of Fort Benning's RCRA Part B permit.

Notably, all Landfills at Fort Benning have had either RFIs performed on them or are in the final investigative phases. With the exception of Landfills 2, 4, 6, 7, 8, and 13, most require no further action other than groundwater monitoring.

## COMPLETED REM/IRA/RA:

- FBSB-75 Close Sanitary Landfill 13 RA (landfill recapped)
- FBSB-86 Pesticide Storage Area RA (removal of soil and demolished buildings)
- FBSB-87 Chemical Agent Burial Site erect fence (IRA)
- FBSB-95 Removal of LUST (IRA)
- FBSB-96 Main Mall RA (installation of SVE equipment)
- FBSB-96 Main Mall RA (operation of SVE equipment)

## CURRENT REM/IRA/RA:

- FBSB-95 Leaking USTs Groundwater Treatment/Air sparging
- FBSB-97 Abandoned Drum site Drum Removal
- FBSB-99 Ordnance Shop Soil removal

## FUTURE REM/IRA/RA:

- FBSB-39 Soil Removal
- FBSB-54 Installation Paint Facilities Soil Removal
- FBSB-68 Landfill 6 Soil Removal
- FBSB-69 Landfill #7 Erosion Control and GW monitoring.
- FBSB-70 Landfill #8 Stabilization of LF Slopes
- FBSB-87 Chemical Agent Burial Site Removal of Chemical Agent Vials
- FBSB-88 Fire Training Area Soil Removal
- FBSB-93 Instal Tank Maint Shop Groundwater Treatment
- FBSB-94 Installation Gas Stations Soil Removal

#### Innovative Means to Expedite Process to RA Phase

The findings of the 1995 SWMU Investigation conducted by USACHPPM are of great assistance in implementing the IRP. The results of this study have provided additional information and accurate documentation concerning sites previously not examined at Fort Benning, of which there are many.

Additionally, the use of the Savannah District Corps of Engineers "Site Characterization, Analysis Penetrometer System", (SCAPS), in FY97 assisted in providing risk characterizations for previously unranked sites. The SCAPS enabled us to characterize potentially contaminated sites to the extent that a Relative Risk Site Evaluation, (RRSE), ranking could be assigned to each of the unranked sites.

As a result of relative risk ranking, sites with little to no contamination can be eliminated early in the study process while those with confirmed contamination can be quickly directed to the Corrective Measures Study phase.

Innovative technologies have also been used as a means of expediting the remedial action process. "State of the Art" technologies such as Soil Vapor Extraction, Air Sparging, Bio-remediation, Bio-venting, chemical/thermal oxidation and dual phase recovery are being seriously considered and used as corrective actions for IRP projects.

## Community Involvement

### RESTORATION ADVISORY BOARD (RAB) STATUS

In February 1995 Fort Benning initiated a Community Relations Plan, (CRP), to provide the public with the latest information concerning installation environmental issues of concern. Additionally the CRP was implemented to improve lines of communication between Fort Benning and the residents of Columbus and Phenix City.

As part of the CRP, residents of the Fort Benning and Columbus/Phenix City communities were asked if they were interested in having a Restoration Advisory Board (RAB) established, or in being selected as a member of a RAB. After all the responses were reviewed and the CRP was completed it was determined that there was not enough sustainable community interest in creating a Fort Benning RAB. Respondents repeatedly claimed that they trusted Fort Benning officials and the U.S. Army to do what was necessary in cleaning up environmental contamination.

The CRP was updated in October 1997, January 2000, and more recently in April 2004. The public was again queried concerning whether or not there was sufficient community interest in forming a RAB. The overall judgement was that there was still not enough local community interest in forming a RAB. In 2006, the CRP will be updated again. If the local community indicates an interest in establishing a RAB, one will be formed.